

**THE CLEAN WATER ACT AT FIFTY: HIGHLIGHTS
AND LESSONS LEARNED FROM A HALF CEN-
TURY OF TRANSFORMATIVE LEGISLATION**

(117-59)

REMOTE HEARING
BEFORE THE
SUBCOMMITTEE ON
WATER RESOURCES AND ENVIRONMENT
OF THE
COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES
ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

SEPTEMBER 20, 2022

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U.S. House of Representatives
Washington, DC 20515

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SEPTEMBER 15, 2022

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Water Resources and Environment
FROM: Staff, Subcommittee on Water Resources and Environment
RE: Subcommittee Hearing on “The Clean Water Act at Fifty: Highlights and Lessons Learned from a Half Century of Transformative Legislation”

PURPOSE

The Subcommittee on Water Resources and Environment will meet on Tuesday, September 20, 2022, at 10:00 a.m. EDT in the Rayburn House Office Building, Room 2167, and via Zoom, to receive testimony on “The Clean Water Act at Fifty: Highlights and Lessons Learned from a Half Century of Transformative Legislation.” The purpose of this hearing is to examine the Clean Water Act in its 50th year of enactment and how the United States is progressing towards its original intent and goals.

BACKGROUND: OVERVIEW OF THE CLEAN WATER ACT

The Federal Water Pollution Control Act Amendments of 1972, more commonly known as the Clean Water Act (CWA), is the federal government’s primary statutory tool for protecting the quality of the nation’s surface waters and wetlands.¹

The basis of the law was enacted in 1948—then called the Federal Water Pollution Control Act—and established the first comprehensive statement of federal interest in clean water programs.² Yet, at the time, water pollution continued to be viewed as primarily a state and local problem and contemporaneous federal legislation contained “no federally required goals, objectives, limits or even guidelines [and] federal involvement was limited to matters involving interstate waters and only with the consent of the state in which the pollution originated.”³ However, even as the federal role expanded over time to include additional intrastate and interstate waters, there was “mounting frustration over the slow pace of pollution cleanup efforts,”⁴ including time-consuming enforcement procedures, flawed approaches to determining water quality, and a lack of universal implementation of pollution control technologies, such as sewage treatment.⁵

Due to this limited progress and with bipartisan consensus on the importance of ensuring clean, reliable water, Congress significantly reorganized and expanded the federal clean water authority in 1972.⁶ This overwhelmingly popular bill, enacted

¹ Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq.

² See Gatz, Laura, “Clean Water Act: A Summary of the Law,” Congressional Research Service (RL 30030) updated October 18, 2016.

³ *Id.*

⁴ *Id.* at 2.

⁵ *Id.* In the 1950s and 1960s, water pollution control programs that amended the 1948 statute extended the federal role and federal jurisdiction to include navigable intrastate and interstate waters, as well as established a program of water quality standards requiring states to set standards for interstate waters to determine actual pollution levels and control requirements.

⁶ *Id.* According to the Congressional Research Service (CRS), the 1972 Clean Water Act did not continue the basic components of previous laws as much as it set up new ones. It set optimistic and ambitious goals, required all municipal and industrial wastewater to be treated before being discharged into waterways, increased federal assistance for municipal treatment plant

Continued

by a 10-to-1 bipartisan override of former President Nixon's veto, is now commonly referred to as the Clean Water Act.⁷

The 1972 CWA established two national goals: the elimination of discharge of pollutants into navigable waters by 1985; and, wherever attainable, the achievement of an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water by July 1, 1983 (also known as "swimmable and fishable waters").⁸ While the nation has made great progress towards these goals, neither has been met in all waters yet.⁹

To achieve its goals, the Clean Water Act has two large areas of emphasis. The first area of emphasis centers on regulatory provisions that impose progressively more stringent technology-based (or water quality-based) requirements on industries and municipalities to reduce or eliminate the discharge of pollutants and to regulate the discharge of dredged or fill materials into wetlands.¹⁰ The second area focuses on funding provisions that authorize federal financial assistance for municipal wastewater treatment plant construction.¹¹ Planning and financial and technical assistance for various regions and issues are also addressed.¹²

CLEAN WATER ACT PERMITTING PROGRAMS

*Regulation of Point Sources*¹³

Industries must meet technology-based standards based on the type of pollutant discharged and the age of the facility (e.g., "best available technology achievable"). For municipalities, secondary treatment (defined in regulation as an 85 percent reduction in certain conventional pollutant concentrations as well as maintaining pH levels within a certain range) must be achieved.¹⁴ Additional limitations may also be imposed on dischargers where pollution levels in receiving waters continue to be too high to protect the receiving water's designated uses; this is accomplished through water quality-based effluent limitations.¹⁵

The Environmental Protection Agency (EPA) is responsible for defining what the required level of treatment is for municipalities and for each type of industry to meet its standards.¹⁶ EPA also must develop water quality criteria, specifying the maximum concentrations of pollutants permitted for different designated uses of waters.¹⁷

These requirements are implemented and enforced through permits. All point source dischargers that discharge pollutants directly into jurisdictional waters must obtain a permit for that discharge either from EPA or a state if the state has an EPA-approved permitting program.¹⁸ Permits are based on both technology requirements and water quality impacts and set the concentration and amount of pollutants allowed to be discharged.¹⁹

A state may implement its own permit program in lieu of the federal program if it meets specified requirements and has EPA approval of the state's program.²⁰ Currently, 47 states have EPA-approved point source discharge permit programs under section 402 of the Clean Water Act.²¹

Indirect dischargers, those that discharge to publicly owned treatment works (POTWs) rather than directly into waters, must meet pre-treatment standards similar to those established for direct industrial discharges because POTWs traditionally

construction, strengthened and streamlined enforcement, and expanded the federal role while retaining the responsibility of states for day-to-day implementation of the law.

⁷See <https://www.senate.gov/legislative/vetoes/NixonR.htm>. See also 33 U.S.C. §1251 et seq.

⁸See Gatz; Clean Water Act, Section 101.

⁹See generally, National Water Quality Inventory (<https://www.epa.gov/waterdata/national-water-quality-inventory-report-congress>).

¹⁰See Gatz.

¹¹*Id.*

¹²*Id.*

¹³See generally, National Pollutant Discharge Elimination System (NPDES) Basics, <https://www.epa.gov/npdes/npdes-permit-basics>.

¹⁴Secondary Treatment Regulation, 40 CFR § 133.102 <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-133>.

¹⁵Water Quality Standards, 40 CFR § 131.22 EPA promulgation of water quality standards.

¹⁶<https://www.epa.gov/npdes/npdes-permit-basics>.

¹⁷Clean Water Act; See Gatz.

¹⁸<https://www.epa.gov/npdes/npdes-permit-basics>.

¹⁹<https://www.epa.gov/npdes/npdes-permit-basics>.

²⁰<https://www.epa.gov/npdes/npdes-state-program-authorization-information>.

²¹See generally, NPDES State Program Authority, <https://www.epa.gov/npdes/npdes-state-program-authority>.

are designed primarily for the treatment of domestic sewage.²² Pre-treatment requirements are either enforced by the POTW or by state or federal authorities.²³

The Clean Water Act also establishes a program for regulating stormwater dischargers and regulates discharges from concentrated animal feeding operations.²⁴ The law includes several enforcement provisions, authorizing administrative, civil, and criminal penalties, as well as citizen suits.²⁵

*Programs to Address Non-Point Sources of Pollution*²⁶

Section 319 of the act provides federal financial assistance, in the form of grants, to encourage and assist states in the control of nonpoint sources of water pollution. This provision requires states to identify areas not meeting water quality standards because of nonpoint sources of pollution and to develop programs, as necessary, if states are to receive implementation grants. Notwithstanding the expiration of the authorization for grants, the nonpoint source program has continued to receive appropriations for state implementation efforts.

*Regulation of Dredge and Fill Activities in Jurisdictional Waters*²⁷

Section 404 of the Clean Water Act requires a separate type of permit to dispose of dredged or fill materials in jurisdictional waters (including wetlands). Disposal activities in such waters is regulated under this program to include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities). An individual permit is required for potentially significant impacts.²⁸ Individual permits are reviewed by the U.S. Army Corps of Engineers (Corps) or an approved state or Tribal program, which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines regulations promulgated by EPA.²⁹

*WASTEWATER INFRASTRUCTURE FINANCING*³⁰

Titles II and VI of the Clean Water Act provide authority for grants to states and municipalities and the establishment of clean water state revolving loan funds, respectively, for the construction of treatment works. The Construction Grants program contained in Title II was phased out in favor of state revolving loan funds in the Water Quality Act of 1987 (PL 100–4). For the Construction Grants program, Congress appropriated approximately \$60 billion over the life of the program.³¹

Through the Clean Water State Revolving Fund (“CWSRF”) program, each state and Puerto Rico maintain revolving loan funds to provide low-cost financing for approved water quality infrastructure projects. Funds to establish or capitalize the CWSRF programs are provided through federal capitalization grants and state matching funds (generally equal to 20 percent of federal grants). State revolving funds (“SRFs”) are available to make low-interest loans, buy or refinance local debt, subsidize or insure local bonds, make loan guarantees, act as security or guarantee of state debt, earn interest, and pay administrative expenses. SRF monies may also be used to implement other water pollution control programs such as nonpoint source pollution management and the national estuary program.³²

In 2021, Congress reauthorized federal appropriations for the Clean Water SRF program through enactment of the Infrastructure Investment and Jobs Act (IIJA).³³ The IIJA provided \$11.7 billion over five years for the Clean Water SRF program,

²² <https://www.epa.gov/npdes/national-pretreatment-program-overview>.

²³ <https://www.epa.gov/npdes/national-pretreatment-program-overview>.

²⁴ 40 CFR § 412.68 FR 7269, Feb. 12, 2003 as amended.

²⁵ 33 USC § 1319.

²⁶ See generally, 319 Grant Program for States and Territories, <https://www.epa.gov/nps/319-grant-program-states-and-territories>.

²⁷ See Gatz; see also generally, Permit Program under CWA Section 404, <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404>.

²⁸ 33 U.S.C. § 1344(e)(2).

²⁹ See *id.* Today, only the states of Michigan, New Jersey, and Florida have approved section 404 programs. See also, Clean Water Act 404(b)(1) guidelines, located at 40 CFR 230.

³⁰ See Gatz; see also, Learn about the Clean Water State Revolving Fund (CWSRF), <https://www.epa.gov/cwsrf/learn-about-clean-water-state-revolving-fund-cwsrf>.

³¹ See <https://www.epa.gov/enviro/igms-construction-grants-overview>.

³² 33 U.S.C. § 1383.

³³ Pub. L. 117–58; see also, “Fact Sheet: EPA & The Bipartisan Infrastructure Law” (<https://www.epa.gov/infrastructure/fact-sheet-epa-bipartisan-infrastructure-law>).

and an additional \$1 billion for the Clean Water SRF to specifically address “emerging contaminants”.

OTHER AUTHORITIES

The Clean Water Act contains several targeted programs and authorities that were designed to improve water quality throughout the country.

The National Estuary Program authorizes federal financing for the development and implementation of comprehensive conservation and management plans for improving the overall ecological health of the nation’s estuaries.³⁴

In addition, the CWA authorizes several targeted programs for improving regional water quality in the areas of the Chesapeake Bay, Great Lakes, Long Island Sound, Lake Champlain, Lake Pontchartrain Basin, and for the management of wet weather discharges and stormwater best management practices.³⁵

The IIJA provided renewed federal appropriations for several Clean Water Act authorities, including \$1.7 billion for regional CWA programs and \$132 million for the National Estuary Program.³⁶

CURRENT ISSUES

The successes and future challenges of the Clean Water Act can be succinctly stated. In 1972, only one-third of the nation’s waters met water quality goals. Today, while two-thirds of those waters do meet water quality goals, one-third still remain impaired.³⁷

Much of the success of the Clean Water Act can be attributed to the increased number of municipal sewage treatment plants constructed to address point source pollution. From 1972 to the present, the federal government invested over \$100 billion in construction of these systems, with the initial \$60 billion provided by the initial Clean Water Act construction grant program, and an additional approximately \$50 billion in federal capitalization grants through the Clean Water SRF program.³⁸ In addition, the Clean Water Act’s permit programs have substantially reduced pollution from municipalities and industrial dischargers, further improving water quality across the nation.

However, future challenges remain. First, according to EPA’s most recent Clean Water Needs Survey, total capital wastewater and stormwater treatment and collection needs for the nation are \$271 billion.³⁹ This includes capital needs for publicly owned wastewater pipes and treatment facilities (\$197.8 billion), combined sewer overflow correction (\$48.0 billion), stormwater management (\$19.2 billion), and recycled water treatment and distribution (\$6.1 billion).⁴⁰

In addition, nonpoint sources of pollution continue to be identified by states as a leading source of impairment to the nation’s rivers, streams, and lakes.⁴¹ Nonpoint source pollution comes from diffuse sources, rather than a more distinct point source like a discharge pipe.⁴² Nonpoint pollution sources include agricultural and urban runoff, silviculture, and construction, transportation, and recreational activities.⁴³

Further, there are ongoing questions regarding the jurisdictional scope of the Clean Water Act following two U.S. Supreme Court decisions, *Solid Waste Agency of Northern Cook County v. Corps of Engineers* (“SWANCC”) (2001) and *Rapanos et ux., et. al. v. United States* (“*Rapanos*”) (2006), as well as changes to agency regulations and guidance documents interpreting the scope of Clean Water Act jurisdiction.⁴⁴ The Supreme Court also decided to take up a case this term concerning what is considered the definition of “water of the United States” under the Clean Water Act and granted certiorari to *Michael Sackett, et ux., Petitioners v. Environmental*

³⁴ <https://www.epa.gov/nep/overview-national-estuary-program>.

³⁵ 33 U.S.C. § 1267 et seq.

³⁶ See Pub. L. 117–58. See also, “Fact Sheet: EPA & The Bipartisan Infrastructure Law” (<https://www.epa.gov/infrastructure/fact-sheet-epa-bipartisan-infrastructure-law>).

³⁷ See generally, National Water Quality Inventory (<https://www.epa.gov/waterdata/national-water-quality-inventory-report-congress>).

³⁸ See Ramseur, Jonathan, Federally Supported Projects and Programs for Wastewater, Drinking Water, and Water Supply Infrastructure, Congressional Research Service (R46471), updated August 2, 2022.

³⁹ See <https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2012-report-and-data>.

⁴⁰ *Id.*

⁴¹ See <https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution>.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ See generally, Gatz, Laura, Redefining Waters of the United States (WOTUS): Recent Developments, Congressional Research Service (R42967), updated July 8, 2022.

*Protection Agency, et al. (“Sackett”).*⁴⁵ Oral arguments will be heard on October 3, 2022.

In addition, in the current Congress, the subcommittee has held several hearings and meetings related to other ongoing challenges to addressing local water quality including the issue of emerging contaminants, including PFAS-related chemicals⁴⁶ and the issue of harmful algal blooms.⁴⁷

WITNESS LIST

- Joaquin Esquivel, Chair, State Water Resources Control Board, California
- Michael Witt, General Counsel, Passaic Valley Sewerage Commission, Newark, New Jersey (on behalf of the National Association of Clean Water Agencies)
- Stefanie Tsosie, Senior Attorney, Tribal Partnerships Program, Earthjustice
- Dave Ross, Esq., Partner, Troutman Pepper LLP
- Laura Gatz, Analyst, Congressional Research Service

⁴⁵Sackett v. EPA, Case No. 21–454.

⁴⁶See generally, Subcommittee hearing on “Emerging Contaminants, Forever Chemicals, and More: Challenges to Water Quality, Public Health, and Communities”, October 6, 2021, <https://transportation.house.gov/committee-activity/hearings/emerging-contaminants-forever-chemicals-and-more-challenges-to-water-quality-public-health-and-communities>.

⁴⁷See generally, Subcommittee roundtable on “Local Perspectives: Combating Harmful Algal Blooms in the Garden State”, July 22, 2022, <https://transportation.house.gov/committee-activity/hearings/local-perspectives-combating-harmful-algal-blooms-in-the-garden-state>.

THE CLEAN WATER ACT AT FIFTY: HIGHLIGHTS AND LESSONS LEARNED FROM A HALF CENTURY OF TRANSFORMATIVE LEGISLATION

TUESDAY, SEPTEMBER 20, 2022

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON WATER RESOURCES AND
ENVIRONMENT,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:02 a.m. in room 2167 Rayburn House Office Building and via Zoom, Hon. Grace F. Napolitano (Chair of the subcommittee) presiding.

Members present in person: Mr. DeFazio, Mr. Huffman, Mr. Garamendi, Ms. Bourdeaux, Mr. Carbajal, Ms. Norton, Mr. Rouzer, Mr. Katko, Dr. Babin, Mr. Graves of Louisiana, and Mr. Bost.

Members present remotely: Mrs. Napolitano, Ms. Johnson of Texas, Mr. Malinowski, Mr. Stanton, Mrs. Cherfilus-McCormick, Mr. LaMalfa, and Miss González-Colón.

Mrs. NAPOLITANO. Good morning, everybody, ladies and gentlemen. I call this hearing to order.

Today, we are here to celebrate the 50th anniversary of the passage of the Clean Water Act.

Let me begin by asking unanimous consent that the chair be authorized to declare a recess at any time during today's hearing.

Without objection, so ordered.

I also ask unanimous consent that Members not on the subcommittee be permitted to sit with the subcommittee at today's hearing and ask questions.

And without objection, so ordered.

As a reminder, please keep your microphone muted unless speaking. Should I hear inadvertent noise, I will request that the Member please mute their microphone.

And, finally, to submit a document into the record, please have your staff email it to DocumentsT&I@mail.house.gov.

Today, the committee will receive testimony from a number of perspectives on the Clean Water Act and its impacts over the last 50 years. When Congress enacted this law in 1972, it recognized that the Nation's waterways were in crisis, and for too long, we had neglected our moral and financial responsibility to keep our waterways clean and safe.

In 1972, only one-third of the Nation's waters met water quality goals. Through the investments in clean water infrastructure, such

as the historic clean water funding in the Bipartisan Infrastructure Law and rigorous, science-based water quality protections, we have made significant improvements.

However, the job is not done.

Today, 50 years later, we have failed to achieve the act's goal of making the waters, all waters, both fishable and swimmable, with one-third of our waters remaining impaired.

Failing to meet these quality standards goals does not mean that the act has been a failure. Far from it. New investments in water treatment and enforcing water quality standards means that more and more waterways will continue to improve.

For example, thanks to Federal clean water investments and local support, local water bodies such as the Anacostia River in the Nation's Capital, once described as the most polluted river in the United States, may be swimmable and fishable within the next few years.

In California, I have supported the Los Angeles River revitalization plan and improvements to the San Gabriel River. Because of collaborative work between locals, the State of California, and the Federal Government, we affirmed the Los Angeles River as a protected, navigable waterway under the Clean Water Act over a decade ago. Work continues on environmental restoration of the Los Angeles River.

Many of today's witnesses have years of experience in working to protect waterways and provide for public health and safety. We will hear how they work, both at the State level as well as locally, to meet the goals and objectives of the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Under the Clean Water Act, the States play a critical role in co-administering the law and taking a leading role in protecting both locally important waters as well as the health of upstream and downstream waters from neighboring States. This Federal and State partnership has been a success for the last 50 years, and it also has been the foundation to the improvements in our Nation's water quality.

States also play a critical role in managing the Clean Water Act State Revolving Funds that provide investments for the construction of water treatment projects. From 1972 to the present, the Federal Government has invested over \$100 billion in construction of sewage treatment plants, both in grants and through the Clean Water SRF program.

When the Clean Water Act was enacted, these clean water infrastructure investments were the largest nonmilitary public works program since the Interstate Highway System. Yet, because the investments are often out of sight and therefore out of mind, we often forget about water infrastructure investments until there is a problem or crisis, such as we have recently seen in Jackson, Mississippi.

Earlier this year, Congress passed the bipartisan Infrastructure Investment and Jobs Act, which provided an additional \$11.7 billion over the next 5 years for the Clean Water SRF, as well as an additional \$1 billion specifically to address emerging contaminants. These investments make a big difference in cleaning up waterways

and for public safety, as well as anything else that comes along. We will hear testimony today on their impacts.

We will also hear about the important work of ensuring that all communities, including Tribal nations, benefit from the protections of the Clean Water Act. For too much of our Nation's history, disadvantaged communities are at the front lines of pollution and contamination. Environmental injustice takes many forms and impacts many different communities.

Today also marks a reflection point on the importance of Federal leadership in protecting our Nation's health, its economy, and the health of our water-based environment. In the past 2 years, the Biden administration has taken steady, scientifically based actions to restore the bedrock environmental laws that protect our water, our air, our environment, and our health.

And as I said numerous times before, the previous administration ignored the bipartisan traditions of Presidents dating back to President Ronald Reagan in seeking to roll back Clean Water Act protections. Fortunately, most of these decisions were quickly overturned by Federal courts as fundamentally flawed or in violation of Federal law, and those that were not are being revisited by the current administration.

However, what the past few years have shown is that leadership matters. The successes we have fought for over the past 50 years need to be constantly protected and extended. That is the task for the next 50 years.

I want to welcome all our witnesses here this morning, and I am grateful for your willingness to share your views and your perspectives on the last 50 years of the Clean Water Act.

I now yield to my great partner and great ranking member, Mr. Rouzer, for any comments and thoughts he might have on the matter.

[Mrs. Napolitano's prepared statement follows:]

Prepared Statement of Hon. Grace F. Napolitano, a Representative in Congress from the State of California, and Chair, Subcommittee on Water Resources and Environment

Today, the committee will receive testimony from a number of perspectives on the Clean Water Act and its impacts over the last 50 years. When Congress enacted this law in 1972, it recognized that the nation's waterways were in crisis, and for too long, we had neglected our moral and financial responsibility to keep our waterways clean and safe.

In 1972, only one-third of the nation's waters met water quality goals. Through investments in clean water infrastructure—such as the historic clean water funding in the Bipartisan Infrastructure Law—and rigorous, science-based water quality protections, we have made significant improvements.

However, the job is not yet done.

Today, 50 years later, we have failed to achieve the Act's goal of making all waters both fishable and swimmable, with one-third of our waters remaining impaired.

Failing to meet these water quality goals does not mean that the act has been a failure. Far from it, new investments in water treatment and enforcing water quality standards mean that more and more waterways will continue to improve.

For example, thanks to federal clean water investments and local support, local water bodies, such as the Anacostia River in the nation's capital—once described as one of the most polluted rivers in the United States—may be swimmable and fishable within the next few years.

In California, I have supported the Los Angeles River Revitalization Plan and improvements to the San Gabriel River. Because of collaborative work between locals, the state of California, and the federal government, we affirmed the Los Angeles River as a protected, navigable waterway under the Clean Water Act over a decade ago. Work continues on environmental restoration of the Los Angeles River.

Many of today's witnesses have years of experience in working to protect waterways and provide for public health and safety. We will hear about how they work, both at the state level as well as locally, to meet the goals and objectives of the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Under the Clean Water Act, states play a critical role in co-administering the law and take a leading role in protecting both locally-important waters, as well as the health of upstream and downstream waters from neighboring states. This federal and state partnership has been a success for the last 50 years and has been a foundation to the improvements in our nation's water quality.

States also play a critical role in managing the Clean Water Act State Revolving Funds that provide investments for the construction of water treatment projects. From 1972 to the present, the federal government invested over \$100 billion in construction of sewage treatment plants, both in grants and through the Clean Water SRF program. When the Clean Water Act was enacted, these clean water infrastructure investments were the largest, nonmilitary, public works program since the Interstate Highway System. Yet, because the investments are often out of sight and therefore out of mind, we often forget about water infrastructure investments until there is a problem or crisis, such as we've recently seen in Jackson, Mississippi.

Earlier this year, Congress passed the bipartisan Infrastructure Investment and Jobs Act, which provided an additional \$11.7 billion over the next five years for the Clean Water SRF, as well as an additional \$1 billion specifically to address emerging contaminants. These investments make a big difference in cleaning up waterways, and we will hear testimony today on their impacts.

We will also hear about the important work of ensuring that all communities, including Tribal nations, benefit from the protections of the Clean Water Act. For too much of our nation's history, disadvantaged communities are on the frontlines of pollution and contamination. Environmental injustice can take many forms and impacts many different communities.

Today also marks a reflection point on the importance of federal leadership in protecting our nation's health, its economy, and the health of our water-based environment. In the past two years, the Biden administration has taken steady, scientifically-based actions to restore the bedrock environmental laws that protect our air, our water, our environment, and our health.

As I have said numerous times, the previous administration ignored the bipartisan traditions of presidents dating back to President Ronald Reagan in seeking to roll-back Clean Water Act protections. Fortunately, most of these decisions were quickly overturned by federal courts as "fundamentally flawed" or in violation of federal law, and those that were not are being revisited by the current administration.

However, what the past few years have shown is that leadership matters and the successes we have fought for over the past 50 years need to be constantly protected and extended. That is the task for the next 50 years.

I want to welcome all our witnesses here this morning, and I am grateful for your willingness to share your views and perspectives on the last 50 years of the Clean Water Act.

I now yield to my great partner in the formulation of a new WRDA bill, Mr. Rouzer, for any comments and thoughts he might have on this matter.

Mr. ROUZER. Well, thank you, Chair Napolitano. And I appreciate your holding this hearing today.

I would also like to thank our witnesses for being with us today.

In 1972, as has been stated and we all know, Congress passed the Clean Water Act in an overwhelmingly bipartisan fashion. Members on both sides of the aisle recognized we had a major problem with water quality in our Nation's waters and understood the many benefits that we derive from access to clean, navigable waters.

North Carolina's Seventh Congressional District, which I am honored to represent, in fact, is known for beautiful waterways and

beaches that provide significant recreational and economic benefits. We also have many important water bodies that we rely on for commerce and drinking water. The Clean Water Act has had great success in its 50 years protecting these waters in North Carolina and all around the country.

However, we have yet to reach the ambitious goal Congress set out in 1972 to make all waters in the United States, quote, “swimmable and fishable.”

We must recognize that to move forward in achieving this goal, it is vital for Congress and the Federal Government to modernize and update the Clean Water Act in a way that is fair and reasonable to all, including the regulated community, which is so integral to our economy and, I might add, is so important to our food and fiber production.

Communities and stakeholders have faced years of regulatory and legal uncertainty in complying with the act. These challenges include overreach by some States when using their section 401 authority under the Clean Water Act to certify that a project meets water quality standards.

Some States have used this authority to block meaningful infrastructure projects they are politically opposed to, for reasons well beyond Clean Water Act goals of water quality.

There is also no greater example of overreach under the Clean Water Act than with the regulatory nightmare of complying with and understanding the definition of “waters of the United States,” or “WOTUS.” This WOTUS definition is used for determining who must obtain a section 404 Clean Water Act permit, which is well-known for being a costly and time-consuming process.

The WOTUS question has been debated for decades in court, and the EPA, under varying Presidential administrations, has issued regulatory definitions of WOTUS that are quite expansive, which was most definitely the case with the 2015 Obama EPA WOTUS rule.

I am very concerned that this administration plans to issue a similar rule that would once again place unnecessary burdens on the communities, farmers, businesses, and industries who also rely on clean water.

This year, the Supreme Court announced it would be taking up a case on the definition of WOTUS, which further shows the enormous impacts these rulemakings have on citizens across the country.

Now I am joining the ranking member of the full committee and several other of my Republican colleagues to express our concerns about this administration’s actions on their proposed rules and to urge the administration to consider the pending Supreme Court’s ruling.

I am looking forward to discussing these important issues with our panel today and learning how we can work together to make the Clean Water Act more effective over the next 50 years.

Madam Chair, this morning, Ranking Member Graves, myself, and several other ranking members of the House committees sent a letter to the EPA and the Corps on WOTUS, which we all know is an issue of importance to the Clean Water Act.

And I ask unanimous consent to enter this letter into the record.

Mrs. NAPOLITANO. So ordered.
[The information follows:]

Letter of September 20, 2022, to Hon. Michael S. Regan, Administrator, U.S. Environmental Protection Agency and Hon. Michael L. Connor, Assistant Secretary of the Army for Civil Works, U.S. Department of the Army, from 15 Ranking Members of the House of Representatives, Submitted for the Record by Hon. David Rouzer

CONGRESS OF THE UNITED STATES,
WASHINGTON, DC 20515,
September 20, 2022.

The Honorable MICHAEL S. REGAN,
Administrator,
U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington,
DC 20004.

The Honorable MICHAEL L. CONNOR,
Assistant Secretary of the Army for Civil Works,
U.S. Department of the Army, 108 Army Pentagon, Washington, DC 20310.

DEAR ADMINISTRATOR REGAN AND ASSISTANT SECRETARY CONNOR:

We write to bring your attention to *West Virginia v. Environmental Protection Agency (EPA)*, a recent Supreme Court decision that clarified the limitations of certain agency action.¹ Although Article I, Section 1 of the United States Constitution vests “all legislative powers” in Congress,² the Biden Administration has largely relied on executive action to advance its radical agenda. For example, in his first year, President Biden issued more executive orders and approved more major rules than any recent president.³ We are concerned that such reliance on the administrative state undermines our system of government. Our Founders provided Congress with legislative authority to ensure lawmaking is done by elected officials, not unaccountable bureaucrats.⁴ Given this Administration’s track record, we are compelled to underscore the implications of *West Virginia v. EPA* and to remind you of the limitations on your authority.

In *West Virginia v. EPA*, the Court invoked the “major questions doctrine” to reject an attempt by the EPA to exceed its statutory authority.⁵ As the Court explained, “[p]recedent teaches that there are ‘extraordinary cases’ in which the ‘history and breadth of the authority that [the agency] has asserted,’ and the ‘economic and political significance’ of that assertion, provide a ‘reason to hesitate before concluding that Congress’ meant to confer such authority.’”⁶ Under this doctrine, an agency must point to “clear congressional authorization for the authority it claims.”⁷ However, in this instance, the EPA could not point to such authorization. Rather, the EPA “discover[ed] an unheralded power representing a transformative expansion of its regulatory authority in the vague language of a long-extant, but rarely used, statute designed as a gap filler.”⁸ Notably, such discovery “allowed [EPA] to adopt a regulatory program that Congress had conspicuously declined to enact itself.”⁹ As a result, the Supreme Court rejected the EPA’s attempt to so plainly exceed its statutory authority.

Unfortunately, EPA’s attempt to invent new authorities is not unusual for the Biden Administration. Recently, the Court struck down the Centers for Disease Control and Prevention’s attempt to impose an eviction moratorium¹⁰ and the Occupational Safety and Health Administration’s attempt to impose a vaccine or testing

¹ *West Virginia v. EPA*, 597 U.S. ____ (2022).

² U.S. CONST. art. I, § 1.

³ See Federal Register, *Executive Orders* (accessed Aug. 2022), available at <https://www.federalregister.gov/presidential-documents/executive-orders>; see also Deep Dive, *How Biden Has Made Policy With Short-Term, Costly Rules: Charts*, BLOOMBERG LAW (May 2022), available at <https://news.bloomberglaw.com/environment-and-energy/how-biden-has-made-policy-with-short-term-costly-rules-charts>.

⁴ See U.S. CONST. art I; see also THE FEDERALIST NO. 51 (James Madison).

⁵ *West Virginia*, 597 U.S. at 20.

⁶ *Id.* at 17 (citing *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 129, 159–160).

⁷ *West Virginia*, 597 at 4.

⁸ *Id.* at 5.

⁹ *Id.* at 5.

¹⁰ *Alabama Assn. of Relators v. Department of Health and Human Servs*, 594 U.S. ____ (2021).

mandate.¹¹ Thankfully, in *West Virginia v. EPA*, the Court made clear that such reliance on the administrative state will no longer be tolerated. To be clear, “the Constitution does not authorize agencies to use pen-and-phone regulations as substitutes for laws passed by the people’s representatives.”¹² In the United States, it is “the peculiar province of the legislature to prescribe general rules for the government of society.”¹³

One of the most serious instances where a presidential administration has sought to usurp the authority granted to it by Congress is in the attempts to revise the definition of “waters of the United States,” (WOTUS) under the Clean Water Act.¹⁴ For decades, rural communities, farmers, businesses, and industries who rely on clean water have dealt with legal and regulatory uncertainty, compounded with confusing and overreaching Federal regulations over what is considered a WOTUS and subject to Federal regulations and permitting.¹⁵ *West Virginia v. EPA* suggests that there is “reason to hesitate” with regard to this claim of authority given the two criteria outlined by Chief Justice Roberts: the history and breadth of the authority asserted and the economic and political significance of that assertion.¹⁶

Following enactment of the Clean Water Act, the United States Army Corps of Engineers (USACE or Corps) and EPA (collectively, the “Agencies”) promulgated WOTUS regulations in 1986 and 1988, which had been in effect.¹⁷ However, as time progressed, the Corps and EPA began interpreting WOTUS in an increasingly broad way. This culminated in two Supreme Court cases, one in 2001 and the other in 2006, where the Court interpreted the Clean Water Act’s scope more narrowly.¹⁸ However, in the latter of the two cases, *Rapanos v. United States*, the Supreme Court issued a fractured 4–1–4 plurality decision which led to a significant amount of confusion.¹⁹ In this case, Associate Justice Antonin Scalia issued a plurality opinion detailing a narrow, straightforward approach to determine if a body of water is considered a WOTUS. However, Associate Justice Anthony Kennedy issued the concurring opinion that created what is known as the “significant nexus” test for defining WOTUS, which erroneously expands what waters may be considered WOTUS using vague and malleable terminology.²⁰

The Obama Administration then followed this flawed interpretation from Justice Kennedy in its 2015 WOTUS rule, which resulted in an unprecedented expansion of regulatory control by Federal agencies over what is considered WOTUS.²¹ This 2015 rule was entangled in litigation to the point that the United States Court of Appeals for the Sixth Circuit felt compelled to issue a stay on the rule’s enforcement while the Courts evaluated these cases.²² Eventually, the rule was replaced by the Navigable Water Protection Rule in 2020 that brought long awaited clarity on the extent of waters covered under the Clean Water Act.²³ The Biden Administration is now seeking to repeal and replace this rule in a two-part rulemaking, in what appears to be a return to the expansive, confusing, and dubious approach taken by the Obama Administration in 2015.²⁴ Simply put, the fight over the definition of

¹¹ *National Federation of Independent Business v. Occupational Safety and Health Administration*, 595 U.S. _____ (2022).

¹² *West Virginia*, 597 at 56 (Gorsuch, J., concurring).

¹³ *Fletcher v. Peck*, 6 Cranch 87, 136 (1810).

¹⁴ Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. 1251 et seq.

¹⁵ STEPHEN P. MULLIGAN, CONG. RSCH. SERV., R44585, EVOLUTION OF THE MEANING OF “WATERS OF THE UNITED STATES” IN THE CLEAN WATER ACT 2 (2022), available at <https://crsreports.congress.gov/product/pdf/R/R44585>.

¹⁶ *West Virginia*, 597 at 17.

¹⁷ USACE, “Final Rule for Regulatory Programs of the Corps of Engineers,” 51 Fed. Reg. 41,206, (Nov. 13, 1986), available at https://archives.federalregister.gov/issue_slice/1986/11/13/41202-41260.pdf#page=5; EPA, “Clean Water Act Section 404 Program Definitions and Permit Exemptions; Section 404 State Program Regulations,” 53 Fed. Reg. 20,764 (June 6, 1988), available at https://archives.federalregister.gov/issue_slice/1988/6/6/20736-20789.pdf#page=29.

¹⁸ See *Solid Waste Agency of Northern Cook County (SWANCC) v. Corps*, 531 U.S. 159 (2001); *Rapanos v. United States*, 547 U.S. 715 (2006).

¹⁹ *Rapanos*, 547 at 715.

²⁰ *Id.* at 780.

²¹ *Clean Water Rule: Definition of “Waters of the United States,”* 80 Fed. Reg. 37,054 (June 29, 2015).

²² See *Ohio v. Corps* (In re EPA & DOD Final Rule), 803 F.3d 804 (6th Cir. 2006) (granting petitioners motion for stay), available at <https://www.opn.ca6.uscourts.gov/opinions.pdf/15a0246p-06.pdf>.

²³ *The Navigable Waters Protection Rule: Definition of “Waters of the United States,”* 85 Fed. Reg. 22,250 (Apr. 21, 2020).

²⁴ Press Release, EPA, *Army Announce Intent to Revise Definition of WOTUS*, June 9, 2021, available at <https://www.epa.gov/newsreleases/epa-army-announce-intent-revise-definition-wotus>; see, e.g., 33 CFR § 328.3; 33 U.S.C. §1251 et seq.

WOTUS is characterized by opportunistic attempts by both the Obama and Biden Administrations to administratively expand the authority of both the EPA and the Corps.

This assertion of authority by the Corps and EPA is one of great economic and political significance. Earlier this year, the United States Small Business Administration's (SBA's) Office of Advocacy found that "the Agencies improperly certified the proposed rule under the Regulatory Flexibility Act (RFA) because it would likely have direct significant impacts on a substantial number of small entities."²⁵ WOTUS and its subsequent rulemakings have had long standing political and economic significance.²⁶

As such, the United States Supreme Court decided to grant certiorari to *Michael Sackett, et ux., Petitioners v. EPA, et al. (Sackett)*.²⁷ In March, over 200 Members of the House of Representatives wrote to the Agencies urging a halt on all current rulemaking actions surrounding the WOTUS definition as the Supreme Court takes up this landmark case.²⁸ We reiterate that request, and now further stress that the Agencies must consider the decision of *West Virginia v. EPA* prior to issuing a rulemaking that would clearly surpass the Agencies' congressional authority to define WOTUS.

As Ranking Members of several House Committees, including those overseeing your Agencies, we intend to exercise our robust investigative and legislative authority to not only forcefully reassert our Article I responsibilities, but to ensure the Biden Administration does not continue to exceed Congressional authorizations.

Accordingly, to assist in this effort, please answer the following no later than October 4, 2022, as it relates to your Agencies, please provide the following:

- a. A list of all pending rulemakings concerning the definition of WOTUS and the specific Congressional authority for each rulemaking.
- b. A list of all expected rulemakings concerning WOTUS and the specific Congressional authority for each rulemaking.

Thank you for your attention to this matter. If you have questions, please contact Ryan Hambleton, Republican Staff Director, Subcommittee on Water Resources and Environment.

Sincerely,

SAM GRAVES,
*Ranking Member, Committee on
Transportation and Infrastructure.*

DAVID ROUZER,
*Ranking Member, Subcommittee on
Water Resources and Environment.*

MIKE BOST,
*Ranking Member, Committee on
Veterans' Affairs.*

BLAINE LUETKEMEYER,
*Ranking Member, Committee on Small
Business.*

GARRET GRAVES,
*Ranking Member, Select Committee on
the Climate Crisis.*

FRANK D. LUCAS,
*Ranking Member, Committee on
Science, Space, and Technology.*

TOM COLE,
Ranking Member, Committee on Rules.

BRUCE WESTERMAN,
*Ranking Member, Committee on
Natural Resources.*

JAMES COMER,
*Ranking Member, Committee on
Oversight and Reform.*

GLENN "GT" THOMPSON,
*Ranking Member, Committee on
Agriculture.*

JOHN KATKO,
*Ranking Member, Committee on
Homeland Security.*

JASON SMITH,
*Ranking Member, Committee on the
Budget.*

JIM JORDAN,
*Ranking Member, Committee on the
Judiciary.*

RODNEY DAVIS,
*Ranking Member, Committee on House
Administration.*

CATHY MCMORRIS RODGERS,
*Ranking Member, Committee on
Energy and Commerce.*

²⁵ Letter from Major L. Clark, III, Dep. Chief Counsel, Off. of Advoc., SBA, to Hon. Michael S. Regan, Admin., EPA, and the Hon. Michael L. Connor, Assistant Sec'y of the Army for Civil Works, Dep't of the Army (Feb. 7, 2022), available at <https://cdn.advocacy.sba.gov/wp-content/uploads/2022/02/08152154/Comment-Letter-Proposed-WOTUS-Definition-2022.pdf>.

²⁶ See e.g.: Letter from the U.S. Chamber of Commerce, to the Hon. Gina McCarthy, Admin., EPA, and the Hon. Jo-Ellen Darcy, Assistant Sec'y of the Army for Civil Works, Dep't of the Army (Nov. 12, 2014).

²⁷ *Sackett v. EPA*, Case No. 21-454.

²⁸ Letter from Ranking Member Sam Graves, the Hon. Dan Newhouse, et al., to Hon. Michael S. Regan, Admin., EPA, and the Hon. Michael L. Connor, Assistant Sec'y of the Army for Civil Works, Dep't of the Army (Mar. 8, 2022).

Mr. ROUZER. Again, thank you to our witnesses for being here. And I look forward to our discussion.

I yield back.

[Mr. Rouzer's prepared statement follows:]

Prepared Statement of Hon. David Rouzer, a Representative in Congress from the State of North Carolina, and Ranking Member, Subcommittee on Water Resources and Environment

Thank you, Chair Napolitano. I appreciate your holding this hearing, and I would also like to thank our witnesses for being here today to discuss the Clean Water Act.

In 1972, Congress passed what is known today as the Clean Water Act in an overwhelmingly bipartisan fashion.

They recognized we had a major problem with the quality of our nation's waters and understood the many benefits that we derive from access to clean, navigable waters.

The Seventh Congressional District, which I'm honored to represent, is known for beautiful waterways and beaches that provide significant recreational and economic benefits. We also have many important water bodies that we rely on for commerce and drinking water.

The Clean Water Act has had great success in its 50 years protecting these waters in North Carolina and around the country.

However, we've yet to reach the ambitious goal Congress set out in 1972 to make all waters in the United States "swimmable and fishable".

We must recognize that to move forward in achieving this goal, it is vital for Congress and the federal government to modernize and update the Clean Water Act in a way that is fair and reasonable to all, including the regulated community, which is so integral to our economy as well as our food and fiber production.

Communities and stakeholders have faced years of regulatory and legal uncertainty in complying with the Act.

Some of the ways we've seen these challenges include overreach by some states when using their section 401 authority under the Clean Water Act to certify that a project meets water quality standards.

Some States have used this authority to block meaningful infrastructure projects they are politically opposed to for reasons beyond Clean Water Act goals of water quality.

There's also no greater example of overreach under the Clean Water Act than with the regulatory nightmare of complying with and understanding the definition of a "water of the United States" or "WOTUS".

This "WOTUS" definition is used for determining who must obtain a section 404 Clean Water Act permit, which is well known for being a costly and time-consuming process.

The WOTUS question has been debated for decades in Court, and the EPA under varying presidential administrations has issued regulatory definitions of WOTUS that are quite expansive, which was most definitely the case with the 2015 Obama EPA WOTUS Rule.

I am very concerned that this Administration plans to issue a similar rule that would once again place unnecessary burdens on the communities, farmers, businesses, and industries who rely on clean water.

This year the Supreme Court announced it would be taking up a case on the definition of WOTUS, which further shows the enormous impacts these rulemakings have on citizens across the country.

I've joined the Ranking Member of the Full Committee and several other of my Republican colleagues to express our concerns about the Biden Administration's actions on their proposed rules and to urge the Administration to consider the pending Supreme Court's ruling.

I'm looking forward to discussing these important issues with our panel today and learning how we can work together to make the Clean Water Act more effective over the next 50 years.

Again, thank you to our witnesses and I yield back.

Mrs. NAPOLITANO. Thank you, Mr. Rouzer.

I am pleased at this time to yield to the chair of the full committee, Mr. DeFazio, for any thoughts he may have.

Mr. DEFAZIO. Thanks, Madam Chair.

Well, I have served here a long time, 36 years. We made one major attempt at reauthorizing the Clean Water Act when Bud Shuster was the chair. The markup went on for several days, and the bottom line was that we would remove virtually all regulation. And if you wanted to use the water for farming, you wanted to drink it, whatever, that was your responsibility. Clean it up. And the bill was so bad that Newt Gingrich wouldn't even bring it to the floor.

And, unfortunately, now I am hearing echoes of that. And I certainly saw reflections of that in the Trump administration.

Now, I agree with the ranking member when he says he wants it to be more effective. I do, too. When the Clean Water Act passed, Lake Erie was declared dead, dead, d-e-a-d, the Cuyahoga River caught fire. We were driving over it on my way west when I was in the Air Force, and they sent me to graduate school through Ohio.

It said: Do not throw lighted objects from bridge. Flammable substance below.

That was a river. Those are the good old days. Industry didn't have to worry about cleaning it. They just dumped it in the water. Now if you wanted to use that water for something other than a sewer, it was up to you, you, the municipality, the individual, whomever.

At that point two-thirds of the waters of the United States were significantly—

[Audio interruption.]

Mr. DEFAZIO. Two-thirds of the waters of the U.S. were impaired.

And, as Mr. Rouzer said, I want to see it more effective. I do. I would like to see—the fact that one-third is still impaired, I would like for all the waters of the U.S. to not be impaired. There are millions of Americans who would like to be able to swim in the streams or the rivers or the lakes near their house without worrying about toxic chemicals or other things.

So much of our society is dependent upon clean water: fishable, swimmable, drinkable, farmable.

He mentioned North Carolina. North Carolina has such pure water in the mountains that two of the largest breweries in America opened up there because the water is so pure. Now, they aren't going to open up in areas that have impaired water. And many other businesses are dependent upon clean water, as well as our farmers, and obviously municipalities, for their citizens.

So, I am very disturbed at the general trend we have seen here, the mythology around the rule.

Now, I will grant you that the first rule proposed by the EPA under the Obama administration was totally indecipherable. And it allowed these bizarre rumors to arise from the Farm Bureau. Oh, if you have a birdbath in your backyard, it is going to be regulated. If there is a mud puddle, it is going to be regulated. If you have got a drainage ditch, it is going to be regulated.

It was really, really poorly written. They pulled back. Totally rewrote it. And after a number of years, we held a hearing on it. We held it over in the Capitol Visitor Center. We had a joint hearing. I can't remember with what other committee.

And the Republicans had been famously showing this farmer's field and saying, look, this is the kind of thing. He is regulated.

Yes, he was regulated. It is in the region. The region told him he had to get permits to expand his farm. And when I showed that slide to the then-EPA Administrator, I said what would happen to this gentleman under your new rule. She said, he would be categorically exempt. The rule would have removed the ambiguity and the levels of enforcement that varied all around the United States, depending upon the regional office or local offices of the regulatory agencies or the States. It was a good rule.

Then comes the Trump administration, and we will hear from one of the principals in that later today who came before the committee and famously said he had no idea of the impact of the rule they were proposing, how much of the waters the United States would be removed from any regulatory burdens. He said—I think at the time he said 18 to 71 percent. He didn't really know. But they were going to push the rule anyway.

Let's find out afterwards. How much of the wetlands have we destroyed? How much of the rivers have we polluted? How many of the tributary streams have become impaired? Turned out it was 70 percent. He was pretty close. His upper estimate said 71.

And now, there are those who want to turn back the clock and potentially, including the Supreme Court of the United States, who is dealing with a bizarre, divided, two different cases on this, defining what are the regulated waters.

I really don't think—and it's like a few other things that have gone on around here in DC this last year—that the American people are going to want to know that suddenly, the local industry can just start dumping crap in the river again and/or we are not going to deal with other forms of pollution. I think there will be outrage among the Americans like there has been on some other recent Supreme Court decisions.

So, I would hope that we can adopt back the attitude in 1972, 10–1 vote to override President Nixon's veto. And he then became ultimately famous for having passed the Clean Water Act and other environmental laws. It became part of his legacy, even though he tried to veto it and was overruled 10–1. Let's get back to those days. Let's do what the American people really want.

Thank you.

[Mr. DeFazio's prepared statement follows:]

Prepared Statement of Hon. Peter A. DeFazio, a Representative in Congress from the State of Oregon, and Chair, Committee on Transportation and Infrastructure

We are here today to celebrate the 50th anniversary of the passage of the Clean Water Act. Few laws have done more for our public health and the environment.

Clean water is a basic human need and a human right. Families rely on rivers and streams to supply clean drinking water to our homes and businesses. Farmers and brewers rely on clean water to produce good food and drink. Hunters, anglers,

and birders need water and wetlands to sustain wildlife and the \$669 billion outdoor recreation industry, which directly supports 4.3 million jobs nationally.

The Clean Water Act was enacted in 1972 on an overwhelming and bipartisan basis. Before the Act, rivers served as little more than open sewers, Lake Erie was pronounced “dead,” and Ohio’s Cuyahoga River literally caught on fire. Thanks to bipartisan efforts over decades to implement the Clean Water Act, our rivers and lakes are cleaner and safer.

I am pleased that the Biden administration takes the legacy, effectiveness, and importance of this landmark legislation as seriously as I do. First and foremost, the Infrastructure Investment and Jobs Act (IIJA) provides roughly \$13 billion in critical wastewater infrastructure funding to states through the Clean Water Act State Revolving Fund—the first reauthorization of this critical program since its enactment in 1987. The IIJA also invests an additional \$1 billion in wastewater infrastructure improvements to address emerging contaminants, such as PFAS, in our surface waters, and provides an additional \$2 billion to protect critical waters like the Great Lakes, Chesapeake Bay, and Puget Sound. The IIJA funding is vital for upgrading our nation’s clean water infrastructure so that we can realistically achieve the goal of making every body of water fishable and swimmable.

The Biden administration is also playing an active role in restoring some of the tools that made the Clean Water Act so successful. Under the previous administration, we saw unprecedented rollbacks of over 100 environmental regulations. Thankfully, President Biden’s EPA is taking action to undo some of the most egregious maneuvers of the former administration.

New rulemakings will permanently undo the “Trump Dirty Water Rule”—which was quickly overturned by federal courts as “fundamentally flawed”—will strengthen the authority of states and Tribes in protecting their water resources and will restore the longstanding role of science in the decisionmaking process. These actions will restore the efficacy of the Clean Water Act, reduce pollution in our vital natural resources, and protect access to clean water for hundreds of millions of Americans.

Ensuring that Americans have access to clean water is not a political game—our health and livelihoods depend on it. While the Clean Water Act has been tremendously successful, we must keep working to ensure it remains effective. Additional funding is still needed to improve our infrastructure which is overburdened by the challenges of climate change and neglect.

We must be vigilant to ensure that critical investments are targeted to address historically overlooked communities and regions, including rural areas, tribal lands, and minority communities, such as Jackson, Mississippi.

We also must continue to invest in emerging technologies so that we can adequately treat wastewater and industrial discharges before they contaminate our wetlands, lakes, and rivers.

Additionally, communities across the country are experiencing record downpours and flooding or battling lack of access to clean water. Increasingly severe storms cause our sewer systems to overflow and expose residents to unsafe and polluted stormwater.

If the Act is to remain relevant and be successful for another 50 years, we must continue to fund its vital programs and enforce the law. The nation’s water quality has come a long way from the 1970s, but there is still room for improvement. Together, we must remain committed our goal of providing clean water for every American.

Mrs. NAPOLITANO. Thank you, Mr. DeFazio.

Is Mr. Sam Graves, is he able to participate? If not, we will go on to the witnesses.

Thank you very much. We will now proceed to hear from our witnesses who will testify today.

I ask the witnesses to please turn their cameras on and keep them on for the duration of the panel. Thank you very much for being here and welcome to you.

On today’s panel, we have Joaquin Esquivel, chair of the California State Water Resources Control Board; Michael Witt, general counsel of the Passaic Valley Sewerage Commission, Newark, New Jersey; Stefanie Tsosie, senior attorney at Earthjustice; David Ross, partner at Troutman Pepper LLP; and, of course, Laura Gatz, analyst at the Congressional Research Service.

Without objection, your prepared statements will be entered into the record.

And all witnesses are asked to limit their remarks to 5 minutes. Mr. Esquivel, you may proceed.

TESTIMONY OF JOAQUIN ESQUIVEL, CHAIR, CALIFORNIA STATE WATER RESOURCES CONTROL BOARD; MICHAEL D. WITT, GENERAL COUNSEL, PASSAIC VALLEY SEWERAGE COMMISSION, NEWARK, NEW JERSEY, ON BEHALF OF THE NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES; STEFANIE K. TSOSIE, SENIOR ATTORNEY, TRIBAL PARTNERSHIPS PROGRAM, EARTHJUSTICE; DAVID P. ROSS, ESQ., PARTNER, TROUTMAN PEPPER LLP; AND LAURA GATZ, ENVIRONMENTAL POLICY ANALYST, CONGRESSIONAL RESEARCH SERVICE

Mr. ESQUIVEL. Thank you, Chair Napolitano.

And it is an honor to be here with you as well, Committee Chair DeFazio and ranking member and members of the subcommittee.

It is an incredible moment that we have here, 50 years' worth of history of progress on accessing and having universal clean water here in the Nation, but still with a lot of challenges. So, it is an honor to be here with you to discuss some of the things that we can celebrate but also reflect on what we still have to do here.

I just want to reflect as well on the conversation that is here, the backdrop of this celebration of the 50th anniversary of the Clean Water Act, which is still tension and discussion around how best we regulate, how best we achieve what, as Chair DeFazio said, was pretty unanimous agreement that our water bodies were incredibly impaired, that we were needing to reconcile this need for a future where we had livable, swimmable, and clean access to water and air.

But I think it's important to remember that 50 years ago, it was a time as well of other discussions around civil rights, around the Endangered Species Act, around other nationally important pieces of legislation that were passed at a time where here, not unlike 50 years ago, we had divisions amongst us, had a need to have a common vision for how we were going to continue to ensure that we had thriving economies and, importantly, thriving communities.

And so, it is not lost on me here that California actually has a special relationship with the Clean Water Act. You dial back 50 years ago and Porter-Cologne was a State water quality act that was passed in 1969. And in many ways, it was the direct model for the national Clean Water Act, the amendments to the Pollution Control Act at the time where here Justice Robie in California was then the author in many ways of Porter-Cologne and was our first chair here at the State Water Resources Control Board.

And so, this special nexus that California has with the Clean Water Act, with this discussion around how best we ensure that clean water is the basis of our modern economies here, is incredibly important.

What we can reflect on is a lot of progress. You look up and down the State in California where here the water board is fortunate to regulate 1.3 million acres of bays and estuaries, 2,100 river-miles, 1,100 miles of coastline. And we have a lot of progress to be thank-

ful for. I think of the San Diego Harbor and Bay. I think of here where I currently live in Sacramento, where we had discharges from wastewater treatment plants going to our rivers and making them so polluted that we weren't able to use them, to recreate them in the summer as a warming climate makes all the access to our recreational opportunities and clean water even more challenged and important.

And so, that progress is important to remind ourselves. It is easy to take for granted what is 50 years of cleanup of our waterways and making them accessible to our communities.

But we have to also acknowledge we have incredible inequities still. We continue to see headlines around challenges with access to sanitation, challenges with access to clean water. And we need to make sure in this moment, these 50 years' worth of progress, we don't actually go back, we don't start to see the incredible challenges that we saw 50 years ago and have made progress on.

And that is incumbent upon all of us re-embracing this challenge, the call to ensure that access to clean water is the basis of our modern economies and doesn't impair our ability to enjoy the quality of life that is continuing to be challenged. We are, in many ways, reconciling the systems that we have inherited from the 20th century. And we certainly have a lot of 21st-century challenges here amongst us, whether it is the continued inequities we see or the real challenges of the climate crisis that is in front of us, where drought, flood, and wildfire continue to impact the quality of our waters, the ability for us to ensure, again, that we have access to them into the future.

So, now is an incredible time for us to reimagine, and here, recommit, to what is a generational need to reinvest in our water systems, ensure that access to clean water is at the core and center of our common good, and not let what is easy partisan politics make us distracted from what is an incredible amount of success, but also, an incredible opportunity to ignite the imagination of a current generation now that is watching and listening to these very discussions and wondering if we here in leadership positions will have the vision and the strength to continue to commit to access to clean water and let water be a nonpartisan door in which we can all step through and continue to have the critical conversations around what our future looks like and how we all contribute to it in common.

So, thank you. It is an honor to be here. I feel privileged to be so, and look forward to the further discussion here on this item.

[Mr. Esquivel's prepared statement follows:]

Prepared Statement of Joaquin Esquivel, Chair, California State Water Resources Control Board

Good morning Chair and Committee Members, and thank you for this opportunity to participate and reflect on the Clean Water Act in on its fiftieth anniversary. My name is Joaquin Esquivel and I have the honor to Chair the State Water Resources Control Board for the State of California.

California, and the State Water Resources Control Board in particular, has a unique relationship with the Clean Water Act.

The State Water Board, as we refer to it, came into its present form in 1967 when the existing State Water Board and the State Water Rights Board were consolidated.

The State Water Board and the nine Regional Water Quality Control Boards (Regional Water Boards) have regulatory responsibility for protecting the water quality of nearly 1.6 million acres of lakes, 1.3 million acres of bays and estuaries, 211,000 miles of rivers and streams, and approximately 1,100 miles of coastline.

The federal Clean Water Act and the state's Porter-Cologne Water Quality Control Act are the twin foundations of water quality control in California.

WATER QUALITY DATA AND METRICS

As we celebrate fifty years of the Clean Water Act, California continues the work to protect and restore watersheds, marine waters, and ecosystems.

Our Strategic Work Plan outlines our objectives, to ensure river and stream flows support fish, wildlife, recreation and other beneficial uses.

The Work Plan is ambitious and wide-reaching, focusing on items such as:

- Developing timely Clean Water Act Section 401 water quality certifications for large hydropower projects,
- Improving models, tools, and data needed to evaluate the interconnection between streamflow and other beneficial uses,
- Improving management of surface water temperatures to reduce fish mortality and improve watershed and ecosystem health,
- Amending our state's Ocean Plan to address ocean acidification and hypoxia, and to align the Ocean Plan with toxicity policies,
- Implementing statewide harmful algal bloom strategies,
- Implementing a recently-adopted permit for large habitat restoration projects

California is geographically and hydrologically complex, and any effort to apply a statewide water quality standard must begin with an understanding of the many hydrological regimes that can be found from our high deserts to our temperate rainforests.

As our collective understanding of the causes of, and contributions to, water quality impacts grows, so does the work required to ensure a healthy environment for all Californians.

This work begins with our Water Quality Planning and Standards Program, which establishes designated water uses, sets water quality criteria to protect those uses, and develops antidegradation planning to keep waters clean and to protect existing uses.

To give some idea as to the complexity of water quality issues in our state, I would turn your attention to the 2020–2022 California Integrated Report.

The Integrated Report is an inventory and assessment of waters of the state that the State is required to update and submit to the U.S. Environmental Protection Agency every two years.

California rotates which regions are required to update their inventory, and our Central Coast, Central Valley, and San Diego Regions updated their inventory this year.

In the 2020–2022 report, we evaluated nearly 4.6 million rows of data for over 1,600 water bodies and made nearly 25,000 water body-pollutant decisions.

We're learning more and more each year about water in our state, how it is connected to every facet of our lives, and how our changing climate is affecting water in ways that are surprising and unanticipated.

It takes a great deal of time and effort to determine whether a water body is impaired (i.e., not meeting standards), but that is only the beginning of our work.

For each water body and pollutant combination, we then establish a level—a total maximum daily load, known as a TMDL—necessary to restore the water body and protect its beneficial uses.

Sometimes multiple pollutants can be addressed in a single TMDL, and sometimes a TMDL can cover multiple water bodies in a watershed, but each TMDL takes a lot of time and careful consideration.

TMDLs are not casually undertaken, and the State and Regional Water Boards are currently in the process of developing more than 120 TMDLs.

Once a TMDL is completed and adopted, that State and Regional Water Boards update water quality control plans.

Each of the nine regions has a water quality control plan for their jurisdiction, and the State Water Board has water quality control plans for particular areas such as the San Francisco Bay and Sacramento/San Joaquin River Delta, Oceans, Inland Surface Waters, and Enclosed Bays and Estuaries.

Once a TMDL is incorporated into a water quality control plan, the Water Boards can readopt various NPDES permits to ensure that permitted activities no longer contribute to water quality impairments.

For pollution sources that do not have a specific point of discharge, the State Water Board's Nonpoint Source Program takes a watershed-level approach, collaborating with state and federal agencies and local governments to control hard-to-pin-down sources of water quality impairments.

And finally, the State Board's Surface Water Ambient Monitoring Program and the Constituents of Emerging Concern Program improve the state's knowledge and understanding of emerging pollutants, and develop and implement a comprehensive, flexible, statewide management strategy.

These are the programs that will help us better understand pollutants such as microplastics or Per and Polyfluoroalkyl Substances like PFOA or PFOS, that are becoming major sources of water quality impairment.

Our state faces many challenges to ensuring that Californians have access to a clean and healthy environment.

California is no stranger to the tangible and real effects of ongoing climate change.

As we experience our most extreme drought on record, we know that we will have to change our approach towards maintaining water quality.

We're experiencing an epidemic of harmful algal blooms across the state, and our aquatic wildlife is struggling to breathe in oxygen deprived waters from Clear Lake to Lake Merritt in Oakland, and in a myriad of swimming holes that our small rural communities rely on to escape the extreme heat.

Our forests—the ecosystems that are the foundation of headwaters critical to our water system—are suffering as the frequency and intensity of catastrophic wildfires increases.

This additional threat to our State has required an immediate and swift change to vegetation and forest management practices and wildfire resilience projects.

That is why the State Water Board has adopted its Vegetation Treatment General Order to significantly streamline the permitting and approval processes of non-commercial vegetation management projects, without sacrificing water quality.

We also continue to work with our sister agencies such as CalFIRE, the Department of Conservation, and the Department of Fish and Wildlife, to implement the Forest Practices Act which governs the regulation of commercial timber activities on private and state lands, to ensure that timber harvest plans do not have negative environmental impacts.

These holistic approaches are important as the Water Board makes strides to address the environmental justice inequities that have occurred from past, institutional and outdated decision-making governance structures.

ENVIRONMENTAL JUSTICE, RACIAL EQUITY, AND TRANSPARENCY

We seek to meaningfully involve everyone affected by the decision we make, and provide open and transparent opportunities for people to participate in public meetings, hearings, and workshops that may affect their environment and health.

We strive to include those who have been disproportionately impacted by pollution in decision-making processes through outreach and engagement approaches, and the development of multi-language, plain-speaking informational materials.

In that spirit, the Water Boards have declared that meaningful engagement with our state's Native American Tribes is fundamental to our mission.

Working with Native American Tribes holds a special value at the Water Boards because of our parallel relationship to the people we serve, and because of Tribes' historic knowledge and experience managing California's water resources since time immemorial.

The State Water Board, working with our tribal partners, recently developed and defined statewide Tribal Beneficial Uses for water quality purposes, and those beneficial uses are even now being incorporated into the state's water quality plans, acknowledging the importance of traditional ecological knowledge and the unique concerns and needs of Tribes.

Most notably, in 2021, the State Water Board adopted its Racial Equity Resolution and publicly acknowledged that the historical effects of institutional racism must be confronted through government, and we have condemned racism, xenophobia, bigotry, and racial injustice.

We are taking action to develop and implement a Racial Equity Action Plan, which will include specific actions the State Water Board will take to address racial inequities, as well as metrics to measure our progress.

With this action plan, we envision a sustainable California where race no longer predicts where clean water is available or who has access to it.

I want to thank Chair Napolitano and the other members of the Committee for this opportunity to provide a Californian perspective on the Clean Water Act, the progress we have made, and the challenges we face in ensuring everyone in our state has access to clean water.

Thank you.

Mrs. NAPOLITANO. Thank you, Mr. Esquivel.

Mr. Witt, you may proceed.

Mr. WITT. Thank you.

Chairs DeFazio and Napolitano, Ranking Members Graves and Rouzer, and all members of the subcommittee, good morning. Thank you for the opportunity to testify on behalf of the National Association of Clean Water Agencies.

As the country prepares to celebrate the 50th anniversary of the Clean Water Act, it is an honor to be here with you this morning to discuss the vital role that public clean water agencies have played in implementing the far-reaching goals of the act: improving water quality in our Nation's water bodies and protecting public health and the environment.

My name is Michael Witt, and I am general counsel for the Passaic Valley Sewerage Commission in Newark, New Jersey. Formed in 1897, PVSC is one of the oldest environmental agencies in the United States, and we have been providing public sewer service for almost a century. I am also a board member of NACWA, the Nation's leading organization of public clean water utilities that, like PVSC, are on the front lines each day, working to enhance public health and the communities we proudly serve.

While it is difficult to imagine today, prior to the 1970s, the most common form of wastewater treatment was simply to discharge it with little to no processing into the nearest body of water. Resulting public health and environmental damage caused across the country by this practice helped to galvanize national action on wastewater treatment, culminating in the passage of the Clean Water Act in 1972.

By many measures, the Clean Water Act has had the desired effect. More than \$60 billion of initial funding in the 1970s and 1980s helped create vital partnerships among the Federal, State, and local governments to construct and/or update wastewater treatment facilities. As a result, our Nation's water quality and public health have improved dramatically. And public clean water utilities have been at the forefront of that improvement.

Some examples of Clean Water Act funding successes include, as the chairman mentioned, the Cuyahoga River in Cleveland, Ohio, which was so badly polluted that, yes, it actually caught on fire. Fifty years later, with the help of Federal funding and my colleagues at Northeast Ohio Regional Sewer District, water quality in that river has been restored to the level where now it is safe to eat fish caught there again.

The city of Seattle, Washington, is using grants to build innovative green stormwater infrastructure to control its combined sewer system, enabling that city to cut pollution to its waterways by 75 percent. In Alexandria, Virginia, just across the river, Alexandria Renew Enterprises has invested in technology to capture and reuse

biogas from its treatment processes, to use it as a heating fuel. As a result, it has realized a 25-percent reduction in the emission of greenhouse gases.

In my place of work, PVSC, we used Federal grants to construct an advanced secondary treatment process that went operational in 1981. This allows us to provide wastewater treatment services to over 1.5 million people, 1 out of every 6 residents in the State of New Jersey, making PVSC the single most important public health infrastructure investment in the State's history.

These projects and many others like them were funded, in part, by the Clean Water Act. The act has also had major social and economic impacts. Thanks to water quality improvement since 1972, access to outdoor water recreational opportunities has been greatly upgraded and expanded to tens of millions of Americans. These activities generate \$175 billion per year in annual spending and are directly responsible for more than 1.5 million jobs.

Cities, both large and small, are experiencing revitalizations of their once-polluted waterfronts with major investments being made in housing, small business development, and entertainment venues.

Investment in wastewater also provides employment. Today, approximately 1 out of every 300 working Americans is employed in the clean water sector in a variety of well-paid, local jobs. These jobs provide opportunities across a diverse spectrum of educational and skill-set backgrounds.

But while we celebrate the success of the last 50 years, we must acknowledge the challenges ahead. We must maintain and update the clean water infrastructure that we have, while at the same time, plan and build for the future. We must be able to address new pollutant standards, population growth, agricultural and industrial expansion, land development pressures, and a changing climate that directly impacts water and wastewater systems.

This requires strengthening and maintaining the partnership between the Federal, State, and local governments, especially on the issue of clean water funding. While the act and other funding initiatives provide vital support, they do not meet the need for clean water infrastructure investment, which is in the hundreds of billions of dollars.

Thus it is imperative that in the coming fiscal years, Congress fully appropriate all authorized funding measures, such as those under the bipartisan Infrastructure Investment and Jobs Act. Even with Federal assistance, the vast majority of clean water investment in infrastructure will continue to be made by our ratepayers, our customers. And many residents will be pushed up against the limits of affordability. We must, therefore, fully embrace the concepts of environment justice, ensuring the equitable provision of clean water services for all.

Together, public clean water utilities, States, and the Federal Government can continue the important progress made on both the investment and policy fronts and see the next 50 years of the Clean Water Act result in even greater achievements.

Thank you again for the opportunity to speak before you today. This concludes my oral testimony, and I will be happy to answer any questions the committee might have.

[Mr. Witt's prepared statement follows:]

Prepared Statement of Michael D. Witt, General Counsel, Passaic Valley Sewerage Commission, Newark, New Jersey, on behalf of the National Association of Clean Water Agencies

Chairs DeFazio and Napolitano, Ranking Members Graves and Rouzer, and all members of the Subcommittee—good morning. Thank you for the opportunity to testify on behalf of the National Association of Clean Water Agencies, or NACWA, as the country prepares to celebrate the Clean Water Act's 50th Anniversary next month. It is an honor to be with you this morning to discuss the vital role that public clean water agencies have played in implementing the far-reaching goals of the Act—improving water quality in our nation's water bodies and protecting public health and the environment.

My name is Michael Witt, and I am General Counsel for the Passaic Valley Sewerage Commission, or PVSC, in Newark, New Jersey. Formed in 1897, PVSC is one of the oldest environmental agencies in the United States and has provided public sewer service for nearly a century. PVSC operates the fifth-largest wastewater facility in the nation, treating over 250 million gallons of wastewater per day and providing service to 1.5 million residents in 48 municipalities across northeastern New Jersey.

I am also a Board member of NACWA, the nation's leading organization of public clean water utilities that, like PVSC, are on the front lines each day working to enhance public health in the communities we proudly serve.

While it is difficult to imagine today, prior to the 1970s, the most common form of industrial, commercial, and residential wastewater "treatment" was simply to discharge it with little to no actual processing into the nearest stream, river, lake, or ocean. This practice directly impacted human health and the environment, causing illnesses and even deaths from waterborne disease, and destroying entire natural habitats. Indeed, many water bodies were declared to be "dead zones" that could no longer support basic ecosystems.

Realizing the dire and growing public health concerns and environmental degradation, many cities started developing public treatment systems after World War II. The systems transported sewage from homes and businesses to treatment works for basic filtration, or "primary treatment." While a good start, these early efforts could not keep up with increasing population and industrial development, and the resulting increase in water pollution. This problem was shockingly immortalized in the late 1960's with the powerful images of the Cuyahoga River in Cleveland, Ohio catching fire; an indelible image that helped galvanize national action, culminating in the passage of the Clean Water Act in 1972.

By many measures, the Clean Water Act has fulfilled the goals of its drafters. More than \$60 billion dollars provided through the Act's Construction Grants Program in the 1970s and 1980s helped create vital partnerships among the federal, state and local governments to improve wastewater treatment facilities. Over the last 50 years, the effects of the Clean Water Act and its subsequent amendments have had a profoundly positive impact on improving our nation's water quality and public health.

Public clean water utilities have resoundingly responded to the challenge in what can only be described as one of the greatest success stories of modern engineering, science, and planning, highlighting the power of the local-state-federal partnership created by the Act.

There are many examples of this success. 50 years after the Cuyahoga unfortunately served as the posterchild for water pollution, the Ohio Environmental Protection Agency declared that the river had been restored to the level where it is now safe to eat fish caught there. Along with the passage of the Act, my colleagues at the Northeast Ohio Regional Sewer District and its member communities deserve much of the credit for that success.

Other examples include the City of Seattle, Washington, which is using innovative Green Stormwater Infrastructure to control its combined sewer system, enabling the city to cut pollution to its waterways by 75%. In Alexandria, Virginia, just across the Potomac River from where we are sitting, Alexandria Renew Enterprises is capturing and reusing biogas from its treatment process to use as a heating fuel. As a result, it has realized a 25% reduction in greenhouse gas generation since 2005. These projects were funded in part by the Clean Water Act.

At my place of work, PVSC used Clean Water Act construction grants to construct an advanced "secondary treatment" process that went operational in 1981. This allows us to provide wastewater treatment services for one out of every six people in

the entire state, making PVSC the single most important public health infrastructure investment to date in the State of New Jersey.

These are just a handful of the clean water utility success stories under the Clean Water Act. There are many others, including those recorded in NACWA's 50th Anniversary Report—which we celebrated in 2020—at www.nacwa50report.org.

As environmental stewards of our communities, NACWA members take pride in these achievements. But the story goes beyond just the environmental impact; it is also about the positive social and economic impacts the Clean Water Act has had on virtually every community. Thanks to water quality improvement over the last 50 years, access to outdoor recreational opportunities has been greatly upgraded and expanded to tens of millions of Americans who enjoy fishing, swimming, kayaking, and other water activities. These activities generate \$175 billion dollars in annual spending and are directly responsible for more than 1.5 million jobs.

Cities both large and small are experiencing major revitalizations of their once polluted waterfronts with major investments being made in housing, small businesses development, and entertainment venues. Places like the Santa Monica Bay; the Puget Sound; the Potomac River here in Washington, DC; and Boston Harbor, to name a few—which were once considered some of the most polluted in the U.S.—are now considered some of our most valued and treasured bodies of water and support numerous recreational opportunities.

Further, it is estimated that one out of every 300 working Americans is employed in the clean water sector in a variety of well-paid, local jobs. These jobs span a diverse spectrum of education and skills ranging from technology, science, and engineering to finance, legal, human resources, and communications, to tradespeople of all kinds such as mechanics, electricians, plumbers, and steamfitters. Without the investments made under the Clean Water Act and the subsequent hard work initiated by utilities, these positive impacts would not have been realized.

But while we celebrate the success of the past 50 years, we must acknowledge the challenges that lie ahead. These include maintaining and updating the clean water infrastructure we have, while expanding our treatment systems and technologies to address new pollutant standards, population growth, industrial and agricultural expansion, land development pressures, and a changing climate that directly impacts water and wastewater systems.

Central to addressing these future challenges will be maintaining—and strengthening—the partnership between the federal, state, and local governments, especially on the issue of clean water infrastructure funding. While the Clean Water State Revolving Fund (CWSRF), a federal loan program which replaced the Construction Grants Program in the 1980s, and other federal funding initiatives including the recently enacted bipartisan Infrastructure Investment and Jobs Act (IIJA) provide vital funding support, they do not meet the total need for clean water infrastructure investment which is in the hundreds of billions of dollars.

The IIJA is the most important infrastructure bill in a generation, and NACWA and its members are extremely grateful to Congress for advancing it. The IIJA authorized and in some cases directly appropriated historic levels of investment in clean water not seen since the creation of the Construction Grants Program. It is imperative that in the coming fiscal years Congress fully appropriate the funding authorized under the IIJA, both for existing programs such as WIFIA and EPA's Sewer Overflow and Stormwater Reuse Municipal Grants program, as well as for newly authorized programs including low-income water customer assistance and Clean Water Infrastructure Resilience and Sustainability grants. Full funding for these programs will also, critically, help ensure that disadvantaged communities—rural and urban—are able to fully realize the clean water success stories brought about by the Clean Water Act.

Even with the stepped-up federal assistance, the vast majority of investment in clean water infrastructure will continue to be made by our customers through the rates they pay. These rates are anticipated to continue rising as communities address aging infrastructure, compliance obligations, the effects of climate change, and increasingly complex water quality challenges—pushing many against the limits of affordability. As we face all these challenges, we must fully embrace the concepts of environmental justice and ensuring equitable provision of clean water services for all.

As such, to continue advancing clean water progress, Congress, regulators, and local clean water utilities must commit to strengthening constructive collaboration. For one, the enhanced use of Integrated Planning by states and communities in both the enforcement and permitting contexts is imperative to help communities better manage costs and prioritize their growing list of clean water investments and obligations affordably over time to best serve their ratepayers. A critical step toward advancing this collaborative approach was taken when, under the bipartisan leader-

ship of members of this Committee, Integrated Planning was codified into the Clean Water Act in 2018.

Together, public clean water utilities, states and the federal government can continue progress on both the investment and policy fronts to ensure the next fifty years of the Clean Water Act results in even greater achievements than those of the last fifty. Indeed, collaboration, partnerships, and shared responsibility are embodied within the Clean Water Act's "cooperative federalism" framework. As the successes of the past 50 years have shown, the nation's public clean water utilities have earned the right to be a full partner with the federal government in charting the next 50 years of clean water success. This must include a greater focus by all stakeholders on enhanced resource recovery and use of innovative technologies by public clean water utilities, managing escalating capital, operations and maintenance costs, alleviating supply chain concerns, and responding to workforce retention and development challenges. Together we will be able to address overarching priorities including ensuring water affordability, advancing environmental justice, and managing climate uncertainty.

NACWA and its public utility members remain ready and committed to do our part!

Thank you again for the opportunity to testify before you today. This concludes my testimony, and I would be happy to answer any questions the Committee may have.

Mrs. NAPOLITANO. Thank you, Mr. Witt, very much.

Ms. Tsosie, you are recognized.

Ms. TSOSIE. [Speaking Native language.]

Thank you, Chair Napolitano and Ranking Member Rouzer, for the opportunity to testify today. My name is Stefanie Tsosie, and I am a member of the Navajo Nation. Currently, I serve as a senior attorney in the Tribal Partnerships Program at Earthjustice.

In my role as a litigator and advocate at Earthjustice, I have the immense honor and privilege to represent and work with Tribal clients across the country.

I am joining you this morning from the Fort McDowell Yavapai Reservation in the State now known as Arizona, the land that is home to many Tribal nations, including my own.

It seems appropriate that I get the opportunity to testify today on the Clean Water Act from a place where water is so precious. In the 50 years since the Clean Water Act was passed, it has been an instrumental resource for communities and Tribal governments in protecting water resources.

The goals of the Clean Water Act are clear: To restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Despite this clear directive, many of our clients and partners are faced with challenges in achieving these goals. This includes threats to narrow the scope of the Clean Water Act and limiting the protections that it provides to our streams, wetlands, and water resources.

Indeed, it is a Tribe from here in Arizona that successfully litigated an attempt by the Trump administration to narrow the Clean Water Act's applicability. The Pascua Yaqui Tribe, along with other Tribal plaintiffs, have a lawsuit in Federal district court to challenge that Trump-era rule. Under that interpretation of the Clean Water Act, nearly 1,500 streams in New Mexico and Arizona would fall outside the protection of the Clean Water Act.

This would have caused significant harm to Tribal communities here in the Southwest. Fortunately, a new EPA took back the rule, and the Federal court vacated its applicability. Our Tribal clients

prevailed in keeping the Clean Water Act protections for the arid Southwest and its precious water resources intact.

Unfortunately, the Clean Water Act's jurisdiction is an open question in front of the court once again. Our Tribal clients and partners filed an amicus brief with the Supreme Court of the United States in the case of *Sackett v. EPA* in hopes of educating both the court and the public of the importance of the Clean Water Act for Tribal communities.

Clean Water Act jurisdiction is fundamental for our Tribal clients to participate in the process of protecting water, both on and off Tribal lands. The permitting requirements set forth in the various sections of the Clean Water Act provide an avenue for communities to be involved in reviewing the proposed projects that have an impact on our valuable water resources.

Our Tribal clients and partners have used these tools successfully, but they have also faced significant challenges. My written testimony details a few of these successes and pitfalls our Tribal clients and partners have faced within the statutory scheme of the Clean Water Act.

Unfortunately, one source of these pitfalls can be traced either to the lack of consultation or insufficient consultation with Tribes. As I am sure this committee is aware, the Federal Government has a trust responsibility to Tribal nations, which includes the duty to consult. Our Tribal clients and partners have been stewards of the waters and their respective Territories since time immemorial and have a vested interest in continuing that stewardship.

However, the Army Corps of Engineers and EPA must also be a part of that process to meaningfully engage with Tribes on how programs and projects carried out under the Clean Water Act will affect Tribal water resources.

The Clean Water Act has the tools that Tribes can use to protect water, but the future of the Clean Water Act depends on Federal agencies using those tools appropriately. I encourage this committee to use its oversight authority to encourage EPA and the Corps to do just that, and I look forward to working with Federal agencies to make the implementation of the Clean Water Act more effective.

The Clean Water Act has been a valuable resource in the past for our Tribal clients and partners, but it is, by no means, the end of the road to protecting our Tribal waters. The ongoing impacts of climate change and its effects on Tribal communities make protecting our water resources even more critical.

Water is essential for Tribal communities to thrive. Water is life.

Thank you again for the opportunity to be here today.

[Speaking Native language].

[Ms. Tsosie's prepared statement follows:]

Prepared Statement of Stefanie K. Tsosie, Senior Attorney, Tribal Partnerships Program, Earthjustice

Thank you, Chair Napolitano, Ranking Member Rouzer, and all the members of the subcommittee for the opportunity to testify. My name is Stefanie Tsosie, and I am a senior attorney in the Tribal Partnerships Program at Earthjustice. Earthjustice is a non-profit environmental law firm and I have the honor and privilege of working with tribes and Indigenous communities across the country to pro-

protect their natural and cultural resources. I am an enrolled member of the Navajo Nation and I come to my role as a litigator with an immense pride of where I am from and the culture and land that raised me. Although my experiences and my passion may be similar to those of the tribal clients and partners we work with, I am not trying to speak for them. My testimony is intended to provide examples of the experiences we have had at Earthjustice in navigating the Clean Water Act, with an emphasis on the tribal clients and partners we work with. The Act has been a critical tool for tribes to protect the quality of precious waters over its first 50 years, yet still holds unfulfilled potential and can be implemented even more effectively in the future.

The Clean Water Act has been instrumental for many tribal communities as a tool to protect their water resources. The Act and implementing regulations provide an avenue for tribes to be treated as states to administer water quality programs with the same authority as federal agencies. Several tribal nations have used this program to designate uses, which can include cultural uses, for waters on tribal lands and have developed water quality standards to protect those uses. Under the treatment as a state program, the Environmental Protection Agency (EPA) can approve tribal water quality standards and the tribe can then enforce those standards within tribal lands. This status also affords tribes that may be downstream from, or adjacent to, a project on a waterway that flows into their tribal lands a way to protect their water quality from degradation or pollution caused by off-reservation activity. This is a tangible tool that a few of our clients and partners have used to protect precious water resources.

The federal permitting structure and requirements in the Clean Water Act are also an avenue that many tribal nations use to participate in decision-making for potential projects that may impact tribal lands and waters. This range of participation can include commenting on permits required under the Clean Water Act to consulting with federal agencies under Section 106 of the National Historic Preservation Act. When the Army Corps of Engineers (Corps or Army Corps) issues a permit under the Clean Water Act, it is a federal action that triggers other federal laws, protections, and procedures, including government-to-government consultation. Tribes have used this requirement to seek and provide input on the environmental review under the National Environmental Policy Act, to consult on impacted flora and fauna that may be listed under the Endangered Species Act, and to consult on tribal historical resources under the National Historic Preservation Act. Thus, the Clean Water Act permitting process can be a critically important gateway for tribes to have input on potential projects that may impact water resources that are not on or adjacent to tribal lands.

Congress created the Clean Water Act “to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”¹ Although many of our partners and clients have had some success in utilizing the Clean Water Act to protect tribal resources, the Act is only effective if it is being implemented correctly and consistent with the goal of protecting water resources. Many of our tribal clients and partners are still left out of the process entirely for decisions that impact their lands and resources, and provided only token consultation efforts if they are contacted at all. There are still significant hurdles for tribal governments and communities regarding tribal consultation. These hurdles are exacerbated when federal jurisdiction under the Clean Water Act is narrowed, or in some cases eliminated—an outcome that has occurred without any tribal consultation whatsoever.

For example, Section 404 of the Clean Water Act prohibits dredge and fill of material into waters of the United States without a permit from the Army Corps of Engineers.² This process begins with a jurisdictional determination—the Army Corps can only require a permit if the activity will be in jurisdictional “waters of the United States.” Yet, even this first step can pose significant problems for tribes and neighboring communities. The Army Corps does not always consult with tribes before making a jurisdictional determination on areas that affect tribal nations. The effect is that the Corps can make a negative jurisdictional determination on an area that impacts tribal resources without input from that tribe. Once the Army Corps makes that determination, both the Corps’ jurisdiction and the suite of federal statutes, such as the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act, that must be followed to permit an activity in that area can vanish. The effect can be severe and tribes and local communities can be cut out of any remaining permitting processes under state laws.

¹ 33 U.S.C. § 1251(a).

² 33 U.S.C. § 1344.

Another example of where the delegation, and thus relinquishing, of federal jurisdiction impacts tribes is through the state assumption of Section 404 permitting.³ State-assumed permitting processes, even though they are required to be at least as stringent as the Clean Water Act, do not carry with them the federal trust responsibility to consult with tribes or Native Organizations. We have worked on a case where a state that assumed Section 404 permitting authority under the Clean Water Act did not consult with the impacted tribe and did not include the tribe in the permitting process, as would have been required by a federal permitting process. In that case, both the Army Corps and the Environmental Protection Agency claimed they could not provide any redress to the Tribe. This led to language in a decision from the Seventh Circuit acknowledging that “the Tribe got the runaround here” and the tribe’s efforts “ran into a legal labyrinth and regulatory misdirection.”⁴

These examples of narrowing Section 404 jurisdiction ultimately will weaken protection for the nation’s waters, in direct contravention of the goals of the Clean Water Act. The consequences of possibly losing Clean Water Act jurisdiction are dire for tribes in particular, as demonstrated in a case pending before the Supreme Court of the United States, *Sackett v. Environmental Protection Agency*.⁵ For our tribal clients, the elimination of federal jurisdiction over a wide array of wetlands and waters would deprive them of important tools for protecting water quality standards on reservation. It would also impair the tribes’ ability to enforce treaty rights and protect sacred waters off reservation.⁶ This potential threat to the Clean Water Act is also a threat to tribal lands and resources.

Another important tool for protecting water quality in the Clean Water Act is the Section 401 program. This program is incredibly important for tribes, yet our tribal clients and partners face potential new hurdles in successfully implementing the Section 401 program. Section 401 requires that a “certifying authority”, including a state or tribe, review (or waive review) of whether an activity will comply with applicable water quality standards before a federal agency can issue a license or permit.⁷ If the certifying authority concludes that the activity as proposed will not comply with applicable water quality standards, which will result in an impairment of waters within its jurisdiction, it can place conditions on the license or permit, or must deny certification of the project altogether if the project cannot be brought into compliance. Several tribes have developed their own programs under Section 401 to be a certifying authority and have promulgated water quality standards for tribal waters.

In 2020, EPA finalized new Section 401 regulations that dramatically departed from the previous rules, contravened the text and purpose of the Clean Water Act, and curtailed state and tribal authority to ensure integrity of their waters.⁸ A federal district court ordered remand and vacatur of the rule on October 21, 2021, however, the 2020 rule remains in effect due to the Supreme Court staying that vacatur order in April. EPA has recently proposed a new rule announcing an intention to bring EPA’s regulations back in line with the Clean Water Act, subsequent court precedent, and the cooperative federalist structure that undergirds the Act.⁹

It is imperative that states and tribes retain broad authority to review projects that may impact their water quality—not just the point-source discharge itself but the project “activity as a whole,” as intended by the Clean Water Act. A review of the whole project can often reveal a much larger footprint of a project’s impacts or the impacts may be much greater in magnitude, and thus greater impacts to tribal resources. In addition, as proposed by EPA in its new rule, the certifying authority should be authorized to consider environmental justice impacts of a proposed project, including human health impacts on the local population; impacts to resources used for subsistence, cultural resources and uses; treaty-protected resources; and historical injustices such as damming, diversion, or reduction in flow of a water

³ 33 U.S.C. § 1344(g).

⁴ *Menominee Indian Tribe of Wisconsin v. EPA et. al.*, 947 F.3d 1065, 1070, 1074 (7th Cir. 2020).

⁵ *Sackett v. Environmental Protection Agency*, 8 F.4th 1075 (9th Cir. 2021, cert. granted, No. 21–454 (U.S. Jan. 24, 2022)).

⁶ Brief Amicus Curiae for Menominee Indian Tribe of Wisconsin, et al., *Sackett v. Environmental Protection Agency*, No. 21–454 (U.S. June 17, 2022), available at https://www.supremecourt.gov/DocketPDF/21/21-454/228237/20220617081619977_21-454%20Amicus%20Menominee%20Indian%20Tribe%20Of%20Wisconsin.pdf (last accessed Sept. 15, 2022).

⁷ 33 U.S.C. § 1341(a)(1).

⁸ Clean Water Act Section 401 Certification Rule, 85 Fed. Reg. 42,210 (July 13, 2020) (2020 Rule).

⁹ 87 Fed. Reg. 35318–35381 (June 9, 2022).

body, and how those actions have impacted the resources and human population, and whether the activity as a whole will have a long-term impact on the watershed. EPA is required to act as the certifying authority on behalf of states or tribes that do not have “authority to give such certification,” and in carrying out this duty, we support codification of the requirement that EPA comply with applicable consultation policies and tribal treaty provisions. Finally, the requirement that a certifying authority make its determination within a “reasonable time” must account for extensions, particularly where delays in the certification process result from the applicant’s failure to provide complete or requested information about the project and potential impacts.

Section 401 also provides downstream, or adjacent, tribes with treatment as a state status and approved water quality standards, an opportunity to weigh in on whether the upstream project will affect or impair the water quality within their jurisdiction.¹⁰ For projects requiring a federal permit under the Clean Water Act, the Corps might handle the permitting process, but EPA has an opportunity to review whether the project will have impacts on neighboring jurisdictions’ water quality. EPA has the authority to notify neighboring jurisdictions of potential project impacts, and the downstream jurisdiction can determine whether the project will affect their water quality. Although the statutory language in Section 401 is clear on the project materials required and the timing of when such a review period begins, EPA and the Corps have differed in their interpretation of the statute and their implementing regulations of this subsection. This discrepancy has the potential to leave downstream tribal jurisdictions out of the Section 401(a)(2) process and leave them without redress for projects that can degrade waters within their jurisdiction.

Several tribes have successfully used the Section 401 program to regulate water quality. However, many tribal nations do not have treatment as a state under the Section 401 program. For example, all of Alaska’s 229 tribes do not have treatment as a state and the state routinely fails to consult with tribes. For tribes like these around the country, the language of the statute becomes ever more important. Section 401 imposes on all certifying authorities, including states, a duty to safeguard waterways and ensure that the goals of the Clean Water Act are met. Many of our tribal clients and partners either do not have or are not eligible for treatment as a state under Section 401, and must work with state agencies to ensure that the statutory requirements in Section 401 are upheld and implemented fairly and consistently. If Section 401 is weakened, many of those tribes will lose one of the strongest tools by which they can work with states to weigh in on potentially damaging projects and ensure that their resources are protected.

The Clean Water Act created many tools to achieve its goals, and also made many parties responsible for its implementation: the Army Corps of Engineers, EPA, states, and tribes. Unfortunately, states have often been ill-equipped and ill-prepared to handle Clean Water Act programs, putting water resources which tribes, and all other communities, depend on in danger. The state of Florida, a state often defined by its waters, is a prime example of where state-implemented Clean Water Act programs have fallen short. Florida’s National Pollutant Discharge Elimination System (NPDES) program, under Section 402 of the Clean Water Act, has failed to ensure clean waterways, and the state is increasingly known for its toxic algae outbreaks and massive fish kills more than its pristine waters. Water pollution has led to starvation of the state’s beloved manatees, a once unthinkable fate. The Trump administration’s approval of Florida’s inadequate Section 404 program threatens rampant development, and because it is no longer federally run, Florida now lacks the community engagement required under NEPA, the tribal consultation required under NHPA, or the robust listed species protection guaranteed under the ESA.

If we are to realize the promises and potential of the Clean Water Act during its future, federal agencies must insist that states meet their statutory obligations under federal law before they are authorized to administer a federal program. In addition, federal agencies must ensure that delegation of these authorities to states does not absolve them of the federal trust responsibility to safeguard tribal resources and consult with tribal governments on permitting actions that impact their water and other resources. Far too often, tribal communities are left out of the process entirely or are afforded inadequate tribal consultation. This is a particular danger when states assume Section 404 permitting authority.

The Army Corps and EPA must also communicate and work together to ensure the goals of the Clean Water Act are met, and also to protect tribal and community interests. The discrepancy between the Corps and EPA is what left the tribe out of a remedy from the Seventh Circuit when the state assumed Section 404 permitting authority. If the Corps and EPA responded, the tribe may not have “gotten the

¹⁰33 U.S.C. § 1341(a)(2).

runaround.” A potential disagreement between the Corps’ and EPA’s respective regulatory schemes implementing Section 401 could also leave a tribal government that has the authority to regulate waters within its jurisdiction out of the process entirely. If tribes are going to be able to utilize the tools within the Clean Water Act to protect precious water resources, then federal agencies must uphold their end in ensuring tribes are consulted and they must implement the statutory requirements as clearly stated in the Act.

For many of our tribal clients and partners the water resources they are protecting are more than “resources.” Water is life. Water is sacred. Water can be a tie to cultural, spiritual, and historical resources that are essential to tribal identities. The Clean Water Act has been a bedrock environmental statute for 50 years, but tribal lands and waters, and the communities tied to them, date back to time immemorial. The issues presented in this testimony are not hypothetical, they involve clients and partners directly facing both the strengths and pitfalls of the Clean Water Act. As a litigator, advocate, and tribal member, I am grateful for the opportunity to lift up these stories, and I am hopeful that we all can act so that we do not have to wait another 50 years to realize the goals of the Clean Water Act.

Mrs. NAPOLITANO. Thank you very much, Ms. Tsosie.

Mr. Ross, you are recognized.

Please proceed.

Mr. ROSS. Thank you, Chair Napolitano, Ranking Member Rouzer, and members of the subcommittee. Good morning and thank you for the opportunity to testify today. It truly is an honor to be back before the committee.

I have spent the majority of my career working in or around the Clean Water Act in some capacity, whether or not that is representing clients in the private sector on how to comply with the Clean Water Act, or working for the State of Wyoming, advising the agency on how to implement the Clean Water Act and its programs, or in serving as a leading environmental prosecutor for the State of Wisconsin where we prosecuted Clean Water Act or State-delegated Clean Water Act-style cases. And then I also had the honor of running the Clean Water Act program for the Federal Government.

And I can say, with all that experience, I can say unequivocally that the Clean Water Act actually is transformative. So, to whoever came up with the title for this hearing, a gold star. It is very accurate.

I also believe the Clean Water Act is, if not the most, it is certainly one of the most impactful and important pieces of legislation this Congress or Congress has ever passed.

So, congratulations and thank you for holding this hearing.

I do believe it is important to take the time to look back, to reflect, to take a look at our successes. I think they are invigorating. I think they will inspire work as we look around the corner at the work that remains left to do. It also allows us to take a look back and see where we have had some gaps, some problems. Is the act right now ready to be applied for the next 50 years? And so, this type of hearing, looking back, helps us think about whether or not we need to make enhancements to the act, or whether or not we have funding, et cetera. So, congratulations.

Without question, and as you have heard other witnesses in the opening statements, I think the Clean Water Act has been a success. In fact, if you take a look at the Association of Clean Water Administrators, ACWA, as they are called, because the water community loves its acronyms, they have this really, really cool inter-

active book. I am sure there is a technical name for it. But, effectively, it is a storybook. And you can go spend some time taking a look at the great successes that the Clean Water Act [inaudible] has come before. I do encourage members of the subcommittee to take a look at that.

In my personal experience, those stories are representative of the successes that the Clean Water Act has been responsible for.

But we have major work left to do by no question. In fact, we have far, far too many rivers and lakes that are still impaired. I think we have a major challenge. We have done a nice job with conventional pollutants, heavy metals, things like that. But we have major, major work to do with nutrients. I think for certain contaminants like nutrients, things aren't getting better. I think they are probably getting worse. We have emerging contaminant issues like PFAS and others that we are going to have to grapple with. We are still having questions about definitional issues which, I think after 50 years, is unfortunate. So, there is no question we have work to do.

But for me, I want to highlight in my opening statement what I see as the "big three" going forward for what the Clean Water Act needs to focus on. The first—you have heard it and it is important—it is infrastructure. Now, congratulations to this Congress for financing significant investments in helping us upgrade our water and wastewater systems. It is not enough. And I think we need, going forward, the courage to be able to fund, on an annual basis, greater investments in our communities.

Our local communities are making those investments, but I think it is incumbent upon the Federal Government and State governments to help finance that, to help the private sector finance that.

Look, I am concerned about the future financial viability of future generations. I am concerned on how much money we are spending. But I have a little bit of bias in the water sector. And so, I fully support additional investment for infrastructure.

I am really happy we are having a serious national conversation about affordability. I do congratulate this administration for its focus on environmental justice, focus on getting resources to disadvantaged communities. I think it is time, and I think it is admirable the work they are doing.

I think we have to be aware of what drives affordability. Affordability is an environmental justice issue, but what causes it is multifaceted. And so, as we think about structuring regulations going forward under the Clean Water Act, we also must remember that there are drinking water issues, stormwater issues, and all those converge on a single ratepayer. And so, we have to keep that in mind. That single ratepayer is the affordability question, and all of us must keep our eyes on that ball.

And, finally, I think the most important issue—and it certainly does not get talked enough about, and I think Congress really needs to spend some time thinking about it—is the workforce issue. We would not be having the discussion about the success of the Clean Water Act without the dedicated professionals who actually implement it at the water and wastewater treatment plants.

We have a dire situation facing us over the next decade with retirement profile. The retirements are richly earned, but we need to

be thinking about that workforce pipeline. We are investing billions of dollars in infrastructure. But if we do not invest in human capital, those investments in the infrastructure will be wasted.

So, congratulations on this hearing. I look forward to participating. Thank you so much.

[Mr. Ross' prepared statement follows:]

Prepared Statement of David P. Ross, Esq., Partner, Troutman Pepper LLP

Chairs DeFazio and Napolitano, Ranking Members Graves and Rouzer, and members of the Subcommittee, thank you for the opportunity to testify today. It is an honor.

My name is Dave Ross. I am currently a partner at Troutman Pepper LLP in our Washington, DC office, but I live just north of Lake Mendota near Madison, Wisconsin. I appear before this Subcommittee in my personal capacity and offer my perspectives from a career spent navigating the many complexities of the Clean Water Act (CWA). While I did not know it then, my first job out of college was created by the CWA's secondary treatment standards for wastewater, as San Diego, California was looking for innovative ways to reuse wastewater and reduce future capacity demands at its main wastewater treatment plant. I was hired to research various technologies for reclaiming wastewater and looking back now I owe my professional lifelong interest in water reuse to the CWA. I have counseled clients in the private sector on CWA compliance, served as the lead water quality attorney for the State of Wyoming, prosecuted water quality violations for the State of Wisconsin, and managed the nation's CWA program for the federal government. I therefore offer the Subcommittee a fairly unique perspective on CWA implementation, at least based on my lessons learned over the past quarter century.

I want to begin by congratulating the Subcommittee on holding this hearing. In a world that seems drawn to the negative like mosquitos to exhaled breath, it is nice to pause for a moment to celebrate the vision of your predecessors and the hard work of countless Americans who have worked to implement the CWA over the past fifty years. The title of this hearing characterizes the CWA as "transformative." It many ways it was. And it continues to be one of the most significant pieces of legislation this institution has ever passed.

I was born in 1971, the year in which the 92nd Congress was crafting and debating this transformative legislation. It was an era filled with vivid imagery of rivers on fire and water devoid of life. I grew up near the banks of the Fox River in Appleton, Wisconsin. We would play along the river and in the ravines that cut into our neighborhoods. There were vines hanging from the trees that would allow you to swing out over the water, but unlike those idyllic images of plunging into the water cannonball style, we were terrified that the vines would break before returning to the shore. The river was a flowing cesspool.

Thanks to the passage of the CWA, over time the industrial discharges were controlled, the wastewater treatment plants were upgraded, and stormwater and watershed management plans were implemented. Now bald eagles nest and hunt along its banks, people recreate on its waters, and communities celebrate the river for its contribution to the quality of life in the valley.

This story is not unique, as rivers and lakes throughout this country have been revitalized and protected thanks to the multiple program elements included in the Water Pollution Control Act Amendments of 1972, as the CWA is more formally known. Cormorants now fish in the Anacostia, the Milwaukee Riverwalk is a weekend destination, and we are having serious discussions about swimming in the Potomac, an unthinkable concept when I first moved to Washington, DC twenty years ago.

These restorative highlights owe their success to the rather ingenious structure of the CWA. Rather than focus on a single issue or solution, Congress crafted a complex and yet interrelated suite of programs that tackled water pollution on multiple fronts. The Act provided funding mechanisms for communities to invest in infrastructure, incentives for watershed-based planning, water quality-focused standard setting and permitting designed to achieve those standards, technology-forcing provisions and more nuanced recommended criteria, anti-backsliding, adaptive management, enforcement, institutionalized modernization, and public participation. Congress also recognized the careful legal balance between the traditional land and water use authority of the states and the commerce power of the federal government, both explicitly and implicitly. Rare is the statute that uses both regulatory

and non-regulatory programs with equal success and intention. In that regard, the CWA should be a model for generations to come. The statute also provides immense planning and implementation power to the states while ensuring a cabined but powerful role for the federal government. In short, Congress did an admirable job back in 1972, and in later amendments, crafting a remarkably balanced and innovative piece of legislation.

But as with all things, the CWA has some imperfections. Anyone who has spent more than a passing moment with the Act will wish Congress had invested a bit more time defining the term “navigable waters.” And only a law school professor enjoys figuring out the definitional distinctions between “navigable waters” and “navigable waters of the United States.” Also, what did Congress mean when it wrote the phrase “any other appropriate requirement of State law,” why did it clearly authorize partial program delegation under Section 402 and remain silent under Section 404, and why craft a structure where folks need to figure out whether a ditch is a point source or a water, or both? Perhaps it was lawyers creating more work for future lawyers, but it does demonstrate how difficult it is to craft clean and unambiguous legislation.

While the CWA should be viewed as a success through a reflective lens, it is by no means complete in its work. In fact, we have a long way to go to achieve the full vision of the Act. There may be some waters that will never be fishable or swimmable, but we have far too many waters that remain legitimately impaired, and I suspect that as method detection limits continue to drop and our public health sciences continue to advance, the net list of impairments is likely to grow at least for the foreseeable future. And for all our success reducing heavy metals and other conventional pollutants in surface waters, our greatest challenge, at least in terms of specific pollutants, remains excess nutrients. The CWA has limitations in how it addresses non-point sources of pollution, but we have creative tools that can be applied to make significant progress in tackling this challenge. We have not yet meaningfully adopted watershed-based permitting strategies, environmental markets remain underutilized, and water quality trading lacks regulatory certainty. I also believe the Section 319 program has untapped and extremely valuable potential, but at current funding levels it lacks the critical mass to make meaningful improvements in water quality or to be applied more creatively.

As we look to the future, Congress and our state and federal regulators need to remain vigilant in ensuring that the CWA and its programs adapt to our changing needs. For example, we are finally having a national discussion about water affordability, water security, and aging infrastructure. Congress has provided a much-needed infusion of capital to address our aging water and wastewater infrastructure, including in our tribal and environmental justice communities, but there is a disconnect between providing the capital and understanding how that capital is deployed at the community level and the resources that it will take to operate and maintain the new assets. Communities are also looking to secure new sources of water, including embracing water reuse, stormwater capture and desalination technologies, as they design and plan for more resilient futures. But these communities must also plan and adapt to a surge of new regulations coming at both the federal and state level. All these developments impact affordability, and we must be cognizant that with each new requirement, the price of providing water and wastewater services increases and invariably is paid by individual rate payers, many of whom already struggle with monthly bills. This country needs to be much more intentional about embracing integrated planning and recognizing that individual regulatory decisions, while reasonable in a vacuum, have broader societal implications.

As we modernize our way of thinking, we must continue to embrace and deploy modern technology. The water sector is entering the era of digitalization, and we need to incentivize the deployment of real-time monitoring and related systems to optimize the performance of our infrastructure. But we must also recognize that cybersecurity is of paramount importance in our interconnected society and that the wastewater sector needs to take cyber risks as seriously as the drinking water sector.

It is also time we modernize the way we plan and budget for future infrastructure investments. We need to institutionalize, annualize, staff, and fund the needs survey process, and ensure that we are gathering actionable intelligence about the state of our water and wastewater infrastructure using the most advanced asset surveillance techniques. While I am deeply concerned about our generation’s apathy for the financial security of future generations, my bias for the water sector allows me to call for increased funding on an annualized basis to ensure that we close the funding gap in what I consider to be the most critical lifeline sector in our society. But to do that, we rationally need better and more timely data.

I want to close with what I believe is likely the most overlooked, or at least most under-appreciated, risk to the water sector. Over the next decade, an unacceptably high percentage of water and wastewater operators will retire. The same holds true for the skilled trades, engineers, analysts, and other professionals who support that critical workforce. There is no doubt in my mind that we would not be celebrating the success of the CWA if not for the dedicated professionals who operate our nation's wastewater treatment plants, stormwater control features, and related infrastructure. The water sector workforce does not receive the recognition it deserves in our communities, in our state and federal regulatory agencies, and in the halls of Congress.

Over the past year, we have been quick to praise the much-needed investments in our water and wastewater infrastructure. But without a skilled workforce to operate our treatment facilities, the investments in brick and mortar will be wasted. Compounding the problem is the acceleration of technology in this sector. The technology is outpacing our training and development pipeline and will only accelerate as we continue to see the convergence of drinking and wastewater operations through water reuse strategies and the growing interest and need in harvesting stormwater. Congress needs to think about what the water sector looks like a decade from now and help state and local communities plan for the retirement surge that is already occurring.

To the dedicated professionals within the Office of Water at the U.S. Environmental Protection Agency, the thousands of experts working within state agencies across the country, and the hundreds of thousands of people who make the water sector the backbone of our way of life, thank you. The success of the past fifty years is your accomplishment, and the hope for the next fifty is your charge.

To the members of the Subcommittee, thanks again for the opportunity to testify today. I look forward to answering any questions you may have.

Mrs. NAPOLITANO. Thank you, Mr. Ross, very much for your comments.

And now we go to Ms. Gatz. You are on, Ms. Gatz.

Ms. GATZ. Chairwoman Napolitano, Chairman DeFazio, Ranking Member Rouzer, and members of the subcommittee, good morning.

I am Laura Gatz, an environmental policy analyst for the Congressional Research Service. On behalf of CRS, I would like to thank you for inviting me to testify.

As requested by the subcommittee, my testimony focuses on the Clean Water Act's history and goals, selected trends in its implementation, and remaining challenges.

Growing concern about sewage and industrial waste polluting our Nation's waterways prompted enactment of the Federal Water Pollution Control Act in 1948. The act was the first major law Congress enacted specifically to address water pollution. It was designed to control pollution primarily through State efforts with a limited Federal role.

By the 1970s, frustration over the pace of cleanup, increased public interest in environmental protection, and a growing perception that existing law was inadequate set the stage for major changes to the statute.

On October 18, 1972, Congress passed sweeping amendments to the Federal Water Pollution Control Act, which became known as the Clean Water Act. The amendments significantly reorganized and expanded the statute, establishing a new framework to control water pollution. The amendments set ambitious goals for water quality, established the structure for regulating pollutant discharges, and increased Federal assistance for wastewater treatment facility construction.

The amendments expanded the Federal role, giving the recently established EPA authority to implement the act's programs, while retaining the State's role in day-to-day implementation.

The Clean Water Act's objective, as stated in 1972, is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The act also established two goals: To eliminate the discharge of pollutants into navigable waters by 1985 and, as an interim goal, to achieve water quality that is fishable and swimmable by July 1, 1983. While those dates have long passed, efforts to obtain the goals continue.

The past 50 years of the Clean Water Act's implementation have yielded improvements. The act's funding and permitting programs have done much to reduce direct discharges of sewage and industrial waste to the Nation's waterways.

The 1972 Clean Water Act authorized grants for wastewater treatment facility construction. Between 1973 and 1990, Congress appropriated nearly \$52 billion under the program, representing the largest nonmilitary public works program since the Interstate Highway System.

In 1987, Clean Water Act amendments effectively replaced the grant's program with the Clean Water State Revolving Fund program, which has since received more than \$49 billion in appropriations.

EPA and States have used their permitting authorities under the Clean Water Act to reduce discharges from direct, or point, sources of pollution. As these sources became better controlled over time, attention turned to the remaining sources preventing attainment of water quality goals, including stormwater discharges and nonpoint, or diffuse, sources of pollution.

The amendments to the Clean Water Act in 1987 added stormwater permitting requirements. In the decades following promulgation of these requirements, many municipalities have faced challenges in implementing and funding efforts to manage stormwater.

The 1987 amendments also established requirements for States to develop plans to address nonpoint source pollution. Since that time, concern about nonpoint source pollution and its significance to remaining water quality issues has persisted. Notably, EPA recognizes that nutrient pollution, much of which comes from nonpoint sources such as runoff from agricultural and residential areas, is one of the Nation's most challenging water quality problems. The Clean Water Act does not authorize EPA to regulate nonpoint sources, which some observe as a challenge in achieving the act's objectives.

The Clean Water Act has also yielded some success through its place-based restoration programs including its Geographic Programs and National Estuary Program, which have bolstered stakeholder coordination, leveraged resources, and led to the development of comprehensive restoration plans.

Challenges remain as population growth, development, and climate-related impacts limit progress in addressing remaining water quality issues. In addition, infrastructure funding needs persist as States and localities address aging systems and needs for increased capacity and resilience. These and other aspects of implementation

will continue to present Congress, EPA, States, and others with hurdles in their efforts to achieve the ambitious goals of the act.

This concludes my brief remarks. Thank you for the opportunity to testify, and I look forward to your questions.

[Ms. Gatz's prepared statement follows:]

**Prepared Statement of Laura Gatz, Environmental Policy Analyst,
Congressional Research Service**

Chairwoman Napolitano, Ranking Member Rouzer, and Members of the subcommittee, good morning. My name is Laura Gatz, and I am an analyst in Environmental Policy for the Congressional Research Service (CRS). On behalf of CRS, I want to thank you for inviting me to testify today. I have been asked by the Subcommittee to discuss the history of the Clean Water Act, including the goals of the act, selected trends in its implementation identified by the subcommittee, and challenges that remain.

In serving the U.S. Congress on a nonpartisan and objective basis, CRS does not take positions on legislation and makes no recommendations to policymakers. My testimony draws on my own area of specialization at CRS—the Clean Water Act and water quality. I work with a team of analysts with relevant expertise, including policy, economics, toxicology, chemistry, engineering, and law to address related issues for Congress. My CRS colleagues and I remain available to assist the subcommittee in its development and consideration of water quality issues and other legislation.

HISTORY OF THE CLEAN WATER ACT

The origins of the modern-day Clean Water Act date back to the 1899 Rivers and Harbors Act (RHA), which was the first use of a federal statute to control water pollution.¹ Under Section 13 of the RHA, sometimes referred to as the “Refuse Act,” it was unlawful to discharge “any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state into any navigable water of the United States, or into any tributary of any navigable water.”² Although the statute focused on preventing obstacles to navigation, it became a tool for controlling water pollution.³

The Federal Water Pollution Control Act of 1948 (FWPCA) was the first major law enacted by Congress specifically to address water pollution in the United States.⁴ Growing concern about untreated domestic sewage and industrial waste polluting waterways, and the impacts on public health and welfare, prompted its enactment.⁵ The FWPCA was designed to control water pollution primarily through state efforts, with a limited federal role. It did not include federally required goals, objectives, limits, or guidelines. Rather, the federal role consisted mainly of support for research and limited loans to state and local governments to assist in the construction of wastewater treatment facilities. Federal involvement in enforcement was limited to matters involving interstate waters and only with the consent of the state in which the pollution originated.

During the latter half of the 1950s and well into the 1960s, several amendments to the FWPCA shaped water pollution control programs.⁶ The amendments dealt largely with federal assistance to municipal dischargers and with federal enforcement programs for all dischargers. During this period, the federal role and federal jurisdiction were gradually extended to include navigable intrastate waters, as well as interstate waters. Water quality standards became a feature of the law in 1965, requiring states to set standards for interstate waters that would be used to determine actual pollution levels and pollution control requirements.⁷ By the late 1960s, a widespread perception by a range of stakeholders existed that the enforcement procedures were too time-consuming, and that the water quality standards approach

¹ 33 U.S.C. §401 et seq.

² 33 U.S.C. §407.

³ Joel M. Gross and Lynn Dodge, “History of the Clean Water Act,” in *Clean Water Act* (American Bar Association, 2005), p. 5.

⁴ P.L. 80–845.

⁵ See, for example, U.S. Congress, House Committee on Public Works, *Water Pollution Control, Bills to Provide for Water-Pollution-Control Activities in the United States Public Health Service, and for Other Purposes*, 80th Cong., 1st sess., June 1947.

⁶ P.L. 84–660, P.L. 87–88, P.L. 89–234, and P.L. 89–753.

⁷ P.L. 89–234.

was flawed because of difficulties in linking a particular discharger to violations of stream quality standards.⁸ Additionally, frustration among stakeholders mounted over the slow pace of pollution cleanup efforts, and the concern that control technologies were being developed but not applied to the problems.⁹ These perceptions and frustrations, along with increased public interest in environmental protection, set the stage for the 1972 amendments.

In congressional hearings and reports in the early 1970s, some Members of Congress contended that the existing water pollution control legislation was inadequate, and that many of the nation's waters continued to be polluted, with those waters near urban and industrial areas "unfit for most purposes."¹⁰

On October 18, 1972, Congress passed sweeping amendments to the FWPCA, which gave the act its current shape.¹¹ As amended in 1972, the law became commonly known as the Clean Water Act (CWA). The 1972 amendments significantly reorganized and expanded the FWPCA, establishing a new framework to control water pollution. Among the revisions, the amendments set ambitious goals for water quality; established the basic structure for regulating pollutant discharges into waters of the United States; strengthened and streamlined enforcement; and increased federal assistance for municipal treatment facility construction. The amendments expanded the federal role, giving the recently established U.S. Environmental Protection Agency (EPA) authority to implement the act's programs while retaining the states' role of day-to-day implementation of the law.¹²

The CWA's objective, as stated in the 1972 amendments, is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."¹³ The CWA also established two goals: to eliminate the discharge of pollutants into navigable waters by 1985; and as an interim goal, wherever attainable, to achieve water quality that is "fishable" and "swimmable" by July 1, 1983.¹⁴ Although much progress has been made, those goals have not been met fully in many places. While those dates have long passed, the goals remain, and efforts to attain them continue.

Over the years, a number of laws have amended portions of the CWA. While a comprehensive discussion of the amendments is beyond the scope of this testimony, some of these amendments are discussed below in the context of trends in CWA implementation.

SELECTED TRENDS IN CLEAN WATER ACT IMPLEMENTATION

The CWA consists of six titles and a range of provisions, which collectively aim to achieve the act's objectives. The following discussion of trends focuses on selected elements of the statute, identified by the subcommittee:

- federal financial assistance for wastewater infrastructure;
- permitting programs to reduce discharges of pollutants into waters of the United States;
- efforts to manage more diffuse nonpoint source pollution; and
- place-based restoration programs, such as the National Estuary Program and CWA Geographic Programs.

WASTEWATER INFRASTRUCTURE FUNDING¹⁵

Prior to the 1972 amendments to the CWA, the federal government administered a comparatively small program of aid for constructing municipal wastewater treatment plants.¹⁶

Title II of the 1972 CWA authorized grants to states for wastewater treatment plant construction under a program administered by the EPA. Federal funds were provided through annual appropriations under a state-by-state allocation formula contained in the act. States used their annual allotments to make grants to local governments to build or upgrade categories of wastewater treatment projects, in-

⁸Joan M. Kovalic, *The Clean Water Act with Amendments* (Washington, D.C.: The Water Pollution Control Federation, 1982), p. 7.

⁹*Ibid.*

¹⁰Congressional Research Service (CRS), *A Legislative History of the Water Pollution Control Act Amendments of 1972*, Serial No. 93-1, January 1973, pp. 1412, 1420-1425.

¹¹P.L. 92-500.

¹²*Ibid.*

¹³CWA §101(a); 33 U.S.C. §1251.

¹⁴*Ibid.* *Fishable* and *swimmable* are the terms commonly used to reflect the goal that waters provide for the protection and propagation of fish, shellfish, and wildlife, as well as for recreation in and on the water.

¹⁵Jonathan Ramseur, CRS Specialist in Environmental Policy, authored this section.

¹⁶The FWPCA of 1948 (P.L. 80-845) first started the federal aid to municipal wastewater treatment authorities.

cluding treatment plants and related sewer infrastructure. Between FY1973 and FY1990, Congress appropriated nearly \$52 billion under the CWA Title II program, representing the largest nonmilitary public works program since the Interstate Highway System.¹⁷

The Water Quality Act of 1987 (P.L. 100–4) amended the CWA to establish the Clean Water State Revolving Fund (CWSRF) program. The CWSRF program is the main federal funding program for wastewater infrastructure projects throughout the country.¹⁸ After a two-year transition period, this program effectively replaced the CWA Title II grants program. Since the first appropriations for the CWSRF program in FY1989, Congress has provided more than \$49 billion in grants to states and Puerto Rico to capitalize their CWSRFs.¹⁹ According to EPA’s national CWSRF funding data report, federal funds—together with state matching contributions, repaid loans, and other funds—have provided \$153 billion in SRF assistance to support more than 44,000 SRF loans and debt refinance agreements.²⁰ *Figure 1* illustrates the history of EPA wastewater infrastructure appropriations from FY1973 to FY2026 in both nominal dollars and inflation-adjusted (2018) dollars.²¹

¹⁷This figure is nominal (not adjusted for inflation).

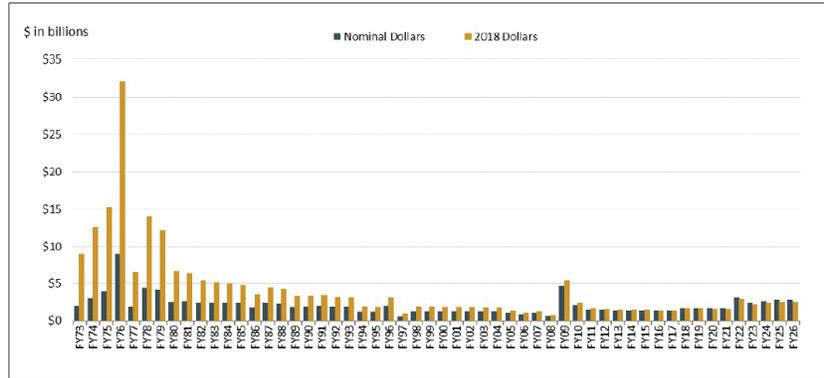
¹⁸33 U.S.C. §§1381–1387. For more details regarding the history of the CWSRF and its predecessor grant program in CWA Title II, see CRS Report 96–647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

¹⁹U.S. territories, Indian tribes, and the District of Columbia receive grants from EPA under separate CWA authorities. This figure is nominal (not adjusted for inflation).

²⁰EPA, Clean Water SRF Program Information, National Summary, February 2022, <https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports>. This figure is nominal (not adjusted for inflation).

²¹The increase in FY2009 was due to \$4.0 billion in emergency supplemental appropriations from the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111–5). For more information, see CRS Report R46464, *EPA Water Infrastructure Funding in the American Recovery and Reinvestment Act of 2009*, by Jonathan L. Ramseur and Elena H. Humphreys. The appropriations for FY2022 through FY2026 include emergency supplemental appropriations provided in the Infrastructure Investment and Jobs Act (IIJA; P.L. 117–58). The FY2022 CWSRF appropriations include both supplemental appropriations from IIJA of \$1.902 billion and regular appropriations (P.L. 117–103), a portion of which did not go directly to the CWSRF program. The regular appropriations for FY2022 in P.L. 117–103 include “community project funding/congressionally directed spending” (CPF/CDS) items, which some have referred to as “earmarks.” The act sets aside 27% (\$443.6 million) of the FY2022 CWSRF appropriations (\$1.639 billion) to CPF/CDS. Such funds are to be distributed directly to recipients, instead of to states’ SRF programs. Thus, the reservation of funds effectively decreases the total amount available for allotment as state capitalization grants to \$1.195 billion. The combined FY2022 appropriations illustrated in the figure for the CWSRF program are \$3.097 billion.

Figure 1. EPA Wastewater Infrastructure Annual Appropriations
(adjusted [\$2018] and not adjusted for inflation [nominal])



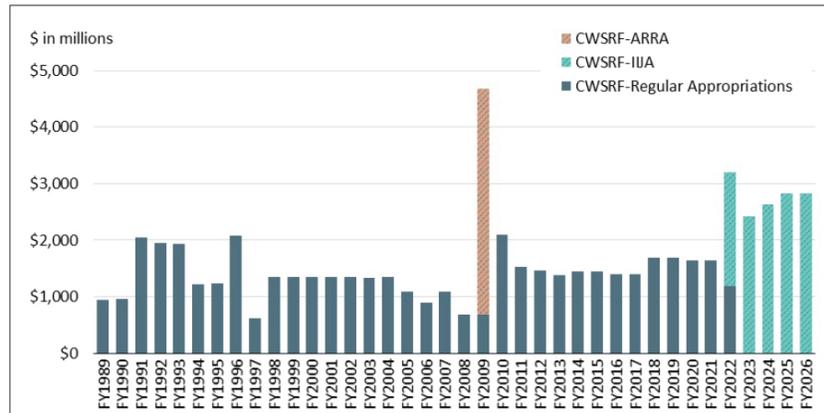
Source: Prepared by CRS using information from annual appropriations acts, committee reports, and explanatory statements presented in the Congressional Record. Amounts reflect applicable rescissions and supplemental appropriations, including \$4 billion in the American Recovery and Reinvestment Act of 2009 (P.L. 111–5). Constant dollars calculated from Office of Management of Budget, Table 10.1, “Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2026,” <https://www.whitehouse.gov/omb/historical-tables/>. The deflator values used for FY2021 through FY2026 are estimates.

Notes: The funding levels for FY2023 through FY2026 are likely to change reflecting funding for the CWSRF through annual appropriations. The Consolidated Appropriations Act, 2022 provides \$1.639 billion for the CWSRF program in FY2022. Of this amount, \$443 million would be provided as “Community Project Funding Items/Congressionally Directed Spending,” and is not included in the figure. In addition, the figure does not include funding for special purpose projects (often referred to as “earmarks”) that occurred between FY1989 and FY2011. For more historical details, see CRS Report 96–647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

Figure 2 illustrates the enacted appropriations for the CWSRF program. The figure depicts regular appropriations between FY1989 and FY2022. As the figure indicates, regular appropriation levels have remained relatively consistent in recent years. The figure also illustrates (1) the supplemental appropriations from the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111–5), which provided \$4 billion in FY2009, and (2) supplemental appropriations from the Infrastructure Investment and Jobs Act (IIJA; P.L. 117–58), which provides supplemental appropriations for FY2022 through FY2026.²²

²²For more information, see CRS Report R46892, *Infrastructure Investment and Jobs Act (IIJA): Drinking Water and Wastewater Infrastructure*, by Elena H. Humphreys and Jonathan L. Ramseur.

Figure 2. CWSRF Appropriations: FY1989–FY2026
(not adjusted for inflation)



Source: Prepared by CRS using information from annual appropriations acts, ARRA, IIJA, committee reports, and explanatory statements presented in the *Congressional Record*.

Notes: ARRA = American Recovery and Reinvestment Act of 2009 (P.L. 111–5); IIJA = Infrastructure Investment and Jobs Act (P.L. 117–58), signed by President Biden on November 8, 2021. IIJA provided supplemental appropriations for the CWSRF for FY2022 through FY2026. The funding levels for FY2023 through FY2026 are likely to change reflecting funding for the CWSRF through annual appropriations. The Consolidated Appropriations Act, 2022 provides \$1.639 billion for the CWSRF program in FY2022. Of this amount, \$443 million would be provided as “Community Project Funding Items/Congressionally Directed Spending,” and is not included in the figure. In addition, the figure does not include funding for special purpose projects (often referred to as “earmarks”) that occurred between FY1989 and FY2011. For more historical details, see CRS Report 96–647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

Over time, Congress has amended the list of projects and activities eligible for CWSRF assistance. Prior to 2014, states were authorized to provide CWSRF financial assistance for a range of projects and activities that was more narrow than the list of eligible projects and activities available today. This earlier list generally included the construction or repair of publicly owned municipal wastewater treatment plants, related equipment and piping, and stormwater systems. Prior to 2014, additional eligible uses included implementation of approved state nonpoint source management programs, and development and implementation of Comprehensive Conservation and Management Plans developed under the National Estuary Program.²³

In 2014, the Water Resources Reform and Development Act of 2014 (WRRDA; P.L. 113–121) amended the CWA, adding several projects and activities, including measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water; replacement of decentralized treatment systems (e.g., septic tanks); energy-efficiency improvements at treatment works; reuse and recycling of wastewater or stormwater; and security improvements at treatment works.

In 2018, the America’s Water Infrastructure Act of 2018 (AWIA; P.L. 115–270) amended the list of eligible activities to allow qualified nonprofits to provide assistance to certain individuals for the repair or replacement of existing decentralized wastewater treatment systems, or for the connection of an individual household to a centralized publicly owned treatment works.

Although the CWSRF program is generally a loan program, the CWSRF program authorizes states to provide SRF recipients with additional subsidization (e.g., “forgiveness of principal” and “negative interest loans”) under certain conditions. The conditions for awarding this support include either (1) affordability criteria (as determined by the state) for the entity receiving the subsidization; or (2) project eligibility, which include projects that (i) address water-efficiency goals; (ii) address energy-efficiency goals; (iii) mitigate stormwater runoff; or (iv) encourage sustainable project planning, design, and construction. IIJA amended the CWSRF statutory pro-

²³ 33 U.S.C. §1383(c).

visions to direct states to use at least 10% of their capitalization grants for additional subsidization under certain conditions. This “floor” for additional subsidization would apply to grants provided through the regular appropriations process in the future. In addition, appropriations acts from recent years have required states to use minimum percentages of their federal grant amounts to provide additional subsidization. This trend began with the ARRA in 2009 (P.L. 111–5), which required states to use at least 50% of their funds to “provide additional subsidization to eligible recipients in the form of forgiveness of principal, negative interest loans or grants or any combination of these.” Subsequent appropriation acts have included similar conditions, with varying percentages of subsidization. The FY2022 appropriations act (P.L. 117–103) contains a provision that requires states to use 10% of their capitalization grant for additional subsidization. In an EPA memorandum on May 12, 2022, EPA interprets this provision as “additive” to the 10% floor in the CWA.

In addition to the CWSRF program, Congress has established other funding and financing programs in recent years that support wastewater infrastructure projects.²⁴ These programs include the following:

- *Water Infrastructure Finance and Innovation Act (WIFIA) Program.* Congress established the WIFIA program in the Water Resources Reform and Development Act of 2014 (P.L. 113–121; 33 U.S.C. §§3901–3914). WIFIA authorizes EPA and the U.S. Army Corps of Engineers (USACE) to provide credit assistance—secured or direct loans—for a range of water infrastructure projects.²⁵ Under WIFIA, EPA provides credit assistance directly to an eligible recipient. To be eligible for WIFIA assistance, projects must generally cost \$20 million or more. The WIFIA program can provide a large amount of credit assistance relative to its budget authority. Annual WIFIA appropriations primarily cover long-term credit subsidy costs, which are calculated to cover the risk that the loan will not be repaid. As such, relative to its budget authority (e.g., \$63.5 million in FY2022 to cover subsidy costs), appropriations provide a larger amount of total credit assistance. For example, Congress capped the FY2022 WIFIA credit assistance authority at \$12.5 billion.
- *Sewer Overflow and Stormwater Grant Program.* In 2000, the Consolidated Appropriations Act, 2001 (P.L. 106–554) amended the CWA by adding Section 221, which authorized EPA to establish a grant program to address overflows from municipal combined sewer systems and from municipal separate sanitary sewers. In 2018, AWIA modified the program to include stormwater infrastructure. P.L. 117–103 provides \$43.0 million for FY2022.
- *Infrastructure Investment and Jobs Act (IIJA) Programs.*²⁶ IIJA established several new grant programs that address specific objectives, such as efficiency, resiliency, and support for infrastructure in low-income communities or communities with smaller populations. The act authorized appropriations for these new programs, but to date, these programs have not received appropriations.

PERMITTING PROGRAMS

Another key aspect of the CWA is the statute’s permit requirements. The CWA prohibits the discharge of pollutants from any point source (i.e., a discrete conveyance such as a pipe or outfall) to waters of the United States without a permit.²⁷ One such permit, issued by states and EPA under the act’s National Pollutant Discharge Elimination System (NPDES) program, applies to industrial and municipal dischargers.²⁸ These permits incorporate both technology-based and water-quality-

²⁴ For more information, see CRS Report R46471, *Federally Supported Projects and Programs for Wastewater, Drinking Water, and Water Supply Infrastructure*, coordinated by Jonathan L. Ramseur.

²⁵ For information on USACE implementation, see CRS Insight IN11577, *U.S. Army Corps of Engineers Civil Works Infrastructure Financing Program (CWIFP): Status and Issues*.

²⁶ For more information, see CRS Report R46892, *Infrastructure Investment and Jobs Act (IIJA): Drinking Water and Wastewater Infrastructure*, by Elena H. Humphreys and Jonathan L. Ramseur.

²⁷ 33 U.S.C. §1311.

²⁸ 33 U.S.C. §1342. Under CWA Section 402, the authority to issue NPDES permits to regulated sources and enforce permits is delegated to states that meet the statutory criteria for delegation (e.g., adequate laws and procedures). EPA has authorized 47 states and 1 territory to administer the NPDES permit program. EPA administers NPDES permits in Massachusetts, New Hampshire, New Mexico, the District of Columbia, and certain territories and Indian lands. Per CWA Section 502(3) (33 U.S.C. §1362(3)), *state* is defined to include a state, the District of Columbia, or any of the U.S. territories. Per CWA Section 518 (33 U.S.C. §1377), EPA is au-

based requirements. A separate type of permit, issued primarily by the USACE under Section 404 of the act, is required to discharge dredged or fill material into waters of the United States.²⁹ Both of these permitting programs were established in the 1972 CWA.

For many years following the enactment of the CWA, EPA and states used their NPDES permitting authorities to reduce discharges from municipal wastewater treatment facilities and industrial facilities. As these more discrete sources of pollution became better controlled, attention turned to the remaining sources that continued to prevent attainment of water quality standards. In the 1987 CWA amendments, Congress directed EPA to implement permitting requirements for stormwater discharges from municipal separate storm sewer systems, construction activities, and industrial activities.³⁰

In the decades following the promulgation of stormwater permitting requirements, municipalities, in particular, have faced challenges in complying with these permitting requirements, and in funding efforts to achieve compliance, particularly in areas with more stringent permit limits.³¹ Some of these challenges have been exacerbated in more recent years by increased rainfall and flooding events.³² Population growth and development have also, in some areas, led to increases in impervious surfaces (e.g., roads, parking lots) that block rainfall from infiltrating into the subsurface. These changes may increase both the volume and pollutant concentrations in the stormwater runoff.

Congress has responded to the concerns of municipalities through efforts such as modifying eligible uses for CWSRF funds and by amending the eligibility provisions for the CWA Section 221 grant program (discussed above) to include stormwater infrastructure. Congress and EPA have also taken action to support the use of green infrastructure—measures that use plant or soil systems, permeable pavement, or other similar surfaces to help reduce stormwater runoff.³³ Some studies have shown that green infrastructure may be more cost-effective than traditional gray infrastructure, particularly when co-benefits are considered.³⁴

EFFORTS TO MANAGE NONPOINT SOURCE POLLUTION

Prior to the 1987 CWA amendments, CWA programs were primarily directed at point source pollution. Except for general planning activities, little attention had been given to nonpoint source pollution (runoff from agricultural lands, forests, and urban areas), despite estimates that it might represent a significant source of the nation's remaining surface water pollution issues.³⁵ Amendments to the CWA in 1987 established measures intended to address such pollution by directing states to develop and implement nonpoint source management programs.³⁶ Further, the 1987 amendments authorized EPA to provide funds to implement nonpoint source management programs. Under Section 319, EPA awards grants to states, territories, and tribes to support a variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects.³⁷

thorized to treat an Indian tribe as a state for certain sections of the CWA, including the sections pertaining to CWA permitting.

²⁹ 33 U.S.C. §1344.

³⁰ P.L. 100–4.

³¹ Environmental Financial Advisory Board, *Evaluating Stormwater Infrastructure Funding and Financing*, March 2020, https://www.epa.gov/sites/default/files/2020-04/documents/efab-evaluating_stormwater_infrastructure_funding_and_financing.pdf.

³² *Ibid.*

³³ The American Recovery and Reinvestment Act of 2009 (ARRA: P.L. 111–5) required states to use not less than 20% of ARRA grants “for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities.” Additionally, the Water Infrastructure Improvement Act (P.L. 115–436), which was enacted in January 2019, amended the CWA to add a definition for the term *green infrastructure* (at 33 U.S.C. §1362(27)) and a new section directing the EPA Administrator to “promote the use of green infrastructure in, and coordinate the integration of green infrastructure into, permitting and enforcement under this Act, planning efforts, research, technical assistance, and funding guidance of the Environmental Protection Agency.”

³⁴ EPA, “Green Infrastructure Cost-Benefit Resources,” <https://www.epa.gov/green-infrastructure/green-infrastructure-cost-benefit-resources>.

³⁵ See, for example, “Senate consideration and passage of 100 H.R. 1,” *Congressional Record*, vol. 133 (January 21, 1987), pp. 1578, 1581, 1583.

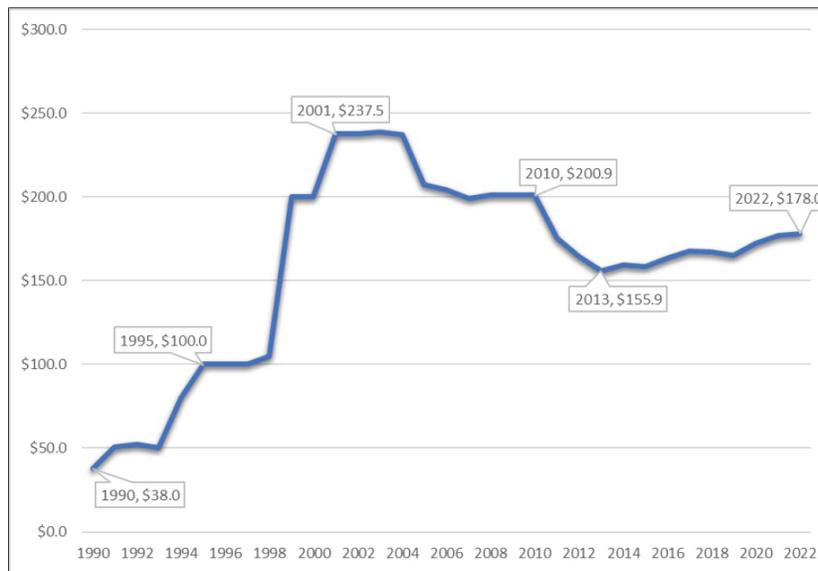
³⁶ P.L. 100–4.

³⁷ EPA, “319 Grant Program for States and Territories,” <https://www.epa.gov/nps/319-grant-program-states-and-territories>.

Figure 3 illustrates the history of Section 319 grant funds provided by EPA, in millions, from 1990 through 2022.

Over the past several decades, concern about nonpoint source pollution, and its significance to remaining water quality issues, has persisted. Notably, EPA recognizes that nutrient pollution—including nitrogen and phosphorus—is one of the nation’s most serious, pervasive, costly, and challenging water quality problems.³⁸ Nutrient pollution contributes to toxic harmful algal blooms and anoxic zones, contamination of drinking water sources, and costly impacts on recreation, tourism, and fisheries. While both point and nonpoint sources contribute nutrients to waterways, it is widely recognized that nonpoint sources play a substantial role in nutrient pollution in many watersheds.³⁹ The CWA does not authorize EPA to regulate nonpoint sources. EPA’s authority to address nonpoint sources involves the use of grants and funding—such as Section 319—and related grants and technical assistance. Some argue that the voluntary nature of controlling nonpoint sources is a key challenge in achieving the act’s water quality objectives. Some also argue that EPA’s current role emphasizes the importance of funds that support nonpoint source pollution reduction efforts.

Figure 3. CWA Section 319 Grant Funds: 1990–2022
(as reported by EPA, in millions; not adjusted for inflation)



Source: EPA, 319 Grant Program for States and Territories, <https://www.epa.gov/nps/319-grant-program-states-and-territories>.

PLACE-BASED RESTORATION PROGRAMS

Although not initially included in the 1972 CWA, place-based restoration programs, another key element of the CWA, have been established through amendments to the act. Place-based restoration programs include the National Estuary Program (NEP) and CWA Geographic Programs.

³⁸EPA, “Nutrient Pollution,” <https://www.epa.gov/nutrientpollution/issue>. See also Joel Beauvais, Deputy Assistant Administrator, EPA, memorandum to State Environmental Commissioners, State Water Directors, “Renewed Call to Action to Reduce Nutrient Pollution and Support for Incremental Actions to Protect Water Quality and Public Health,” September 22, 2016, <https://www.epa.gov/nutrient-policy-data/renewed-call-action-reduce-nutrient-pollution-and-support-incremental-actions>.

³⁹Ibid.

National Estuary Program (NEP)

Congress established the NEP through amendments to the CWA in 1987.⁴⁰ This program, administered by the EPA, identifies “estuaries of national significance”⁴¹ that are threatened by pollution, development, or overuse. Under this program EPA awards grants intended to support the development and implementation of Comprehensive Conservation and Management Plans (CCMPs) to restore and protect them.⁴² CCMPs are long-term plans that contain actions to address a range of environmental issues, including water quality, habitat, land use, fish and wildlife, and invasive species in the estuary. Through the NEP, EPA works with federal agencies, state and local governments, nonprofit organizations, industry, and citizens to address the environmental challenges in each estuary. The NEP includes 28 estuaries located along the Atlantic, Gulf, and Pacific Coasts, and in Puerto Rico.⁴³ Congress has reauthorized the NEP program several times; changes have included establishing new competitive grant awards to address urgent and challenging issues that threaten the ecological and economic well-being of coastal areas, or that relate to the coastal resiliency of NEP estuaries.⁴⁴

CWA Geographic Programs

The CWA Geographic Programs, administered by EPA, also reflect broader collaborative efforts to improve some of the nation’s aquatic resources that Congress, EPA, and states have identified as economically and ecologically valuable. Some of the Geographic Programs have specific statutory authority under individual provisions of the CWA (e.g., Chesapeake Bay, Great Lakes, Long Island Sound, Lake Champlain, Lake Pontchartrain Basin, and Columbia River Basin). The 1987 amendments to the CWA added the Chesapeake Bay and Great Lakes provisions to the statute.⁴⁵ Congress later added provisions for Long Island Sound and Lake Champlain in 1990,⁴⁶ for Lake Pontchartrain in 2000,⁴⁷ and for the Columbia River Basin in 2016.⁴⁸

Several other geographic programs are not individually authorized in the CWA, but Congress has provided funding for each program in EPA appropriations (e.g., Gulf of Mexico, Puget Sound, South Florida, San Francisco Bay, and Southern New England estuaries). Within its congressional budget justifications, EPA cites broad CWA authority for the administration of these other programs. Some of the geographic programs receive funds through both the CWA Geographic Programs appropriations and through NEP appropriations (e.g., Long Island Sound, Puget Sound, and San Francisco Bay).

Under the CWA Geographic Programs, activities include efforts to address water quality impairments, clean up beaches, decrease coastal erosion, protect and improve aquatic habitat, support fisheries, and protect public water supplies. Appropriations provided for the CWA Geographic Programs leverage additional resources including funding and technical assistance made available from other federal and state programs, local stakeholder groups, individuals, and others.

SUCCESSSES AND CHALLENGES

The past 50 years of CWA implementation have yielded improvements in water quality in certain aspects. CWA funding programs and CWA permitting programs have done much to reduce direct discharges of untreated domestic sewage and in-

⁴⁰ P.L. 100–4.

⁴¹ The CWA does not define “estuary of national significance.” However, to facilitate its review of estuary nominations, EPA developed guidance on the nomination process. Regarding national significance, governors were to provide information on why the estuary is important to the nation, the geographic scope of the estuary, and how lessons learned from the estuary could apply to other areas, among other things. EPA, *The National Estuary Program: Final Guidance on the Contents of a Governor’s Nomination*, January 1990.

⁴² P.L. 100–4.

⁴³ EPA, “Overview of the National Estuary Program,” <https://www.epa.gov/nep/overview-national-estuary-program>. Accessed August 12, 2021.

⁴⁴ P.L. 114–162 and P.L. 116–337. CWA §320(g)(4)(C) lists seven specific issues, such as extensive seagrass habitat losses that result in significant impacts on fisheries and water quality, recurring harmful algal blooms, and unusual marine mammal mortalities, that are included as “urgent and challenging issues.”

⁴⁵ P.L. 100–4. Chesapeake Bay (33 U.S.C. §1267), Great Lakes (33 U.S.C. §1268).

⁴⁶ P.L. 101–596. Long Island Sound (33 U.S.C. §1269), Lake Champlain (33 U.S.C. §1270).

⁴⁷ P.L. 106–457. 33 U.S.C. §1273.

⁴⁸ P.L. 114–322. 33 U.S.C. §1275. In 2016, Congress authorized the Columbia River Basin program in the Water Infrastructure Improvements for the Nation Act (P.L. 114–322), but did not provide an authorization of appropriations for the program. In 2018, Congress amended the CWA to add an authorization of appropriations for the program in America’s Water Infrastructure Act (P.L. 115–270).

dustrial waste to the nation's waterways. States continue to make progress in their efforts to reduce stormwater discharges and to address nonpoint sources of pollution through best management practices and other activities. Implementation of place-based programs, such as the National Estuary Program and CWA Geographic Programs, have also bolstered coordination among a range of stakeholders, leveraged resources, and led to comprehensive plans to achieve water quality and restoration goals.

However, challenges remain as population growth and development and climate-related changes (e.g., increased frequency and intensity of storms) limit the progress made in addressing remaining water quality issues, including those caused by nonpoint sources of pollution. In addition, although Congress has provided and continues to provide funds for wastewater and stormwater infrastructure, funding needs persist as states and localities address aging systems and needs for increased capacity and resilience to address population growth and climate-related impacts.⁴⁹ These and other aspects of CWA implementation will continue to present Congress, EPA, states, and other stakeholders with hurdles in their efforts to achieve the ambitious goals of the 1972 act.

This concludes my prepared remarks. Thank you for the opportunity to testify, and I look forward to answering any questions you may have. If additional research and analysis related to this issue would be helpful, my CRS colleagues and I stand ready to assist the subcommittee.

Mrs. NAPOLITANO. Thank you, Ms. Gatz.

Thank you to all our witnesses. We will now move to Member questions, and each Member will be recognized for 5 minutes.

And I begin with Chairman DeFazio for questions.

Mr. DeFazio, you are recognized.

Mr. DEFAZIO. Thank you, Madam Chair. And thanks to all the witnesses for their testimony.

I think there was unanimity among the witnesses that the Clean Water Act is very important, wastewater infrastructure is very important, and those are great points.

But I do want to just hark back to the threats. And the threats come because of litigation over the Trump "dirty water rule," and a conflicted Supreme Court decision from many years ago, two different decisions.

Now my question for Mr. Ross, 3 years ago you testified before this subcommittee, and you were promoting what we have come to call the Trump "dirty water rule." And at the time, I asked you how many streams and wetlands would lose protection under that rule. And you said, again and again and again and again and again, we don't know.

And I thought, well, do you really want to put forward a rule when you don't know what the impact is going to be on massive tributaries and the scope of the rule and its impact on pollution? But the administration pressed ahead.

And when you testified, there were leaked documents from the EPA saying between 18 and 71 percent would be impaired, and roughly 50 percent of all wetlands would be jeopardized, wetlands being very critical. Now we do have those documents, and it came out to 70 percent. Seventy percent would have been at risk under that rule.

Do you have any doubt to the accuracy of these analyses, Mr. Ross?

⁴⁹ For example, EPA published its most recent needs survey in 2016, documenting infrastructure needs from 2012. In this survey, EPA estimated that the capital cost of wastewater infrastructure needed to meet statutory water quality and public health requirements and objectives exceeds \$270 billion over a 20-year period. EPA, *Clean Watersheds Needs Survey (CWNS) Report to Congress—2012, 2016*, <https://www.epa.gov/cwns>.

Mr. ROSS. Thank you, Chairman, for the question.

I do think there are some questions about the accuracy—

Mr. DEFAZIO [interrupting]. Well, come on. Let's get to the point. Do you doubt the accuracy? Would it have had a major impact somewhere around 70 percent would be removed from jurisdiction?

Mr. ROSS. Chair, I—

Mr. DEFAZIO [interrupting]. Yes or no?

Mr. ROSS. I think that data needs to be analyzed holistically in context. And so, I haven't been there—

Mr. DEFAZIO [interrupting]. OK. So, you can't answer.

So, despite your outstanding testimony today, which I thought would have come from either a municipal or someone representing wastewater people and all the great things you talked about there, what good does it do us to spend incredible amounts of money cleaning up the wastewater when some industry, or agricultural group, has dumped a bunch of crap in there which is making the water no longer fishable, swimmable upstream and downstream? That doesn't really help.

I appreciate the little bit of whitewashing. I assume the firm you work for knows your history or whoever your clients are knows your history. But you seem like a very different person here today, and it doesn't seem like you are going answer anymore honestly than you did 3 years ago.

I do appreciate you saying we should increase funding. I hope that your Republican colleagues on that side of the aisle listen. That was the first reauthorization of the SRF since 1987. We proposed a much larger number here in the House, which was opposed by my Republican colleagues. Luckily, the Senate was a little bit more enlightened, and we got a decent amount of money. But as you noted, we need much, much more around the Nation.

Do any other members of the panel wish to opine upon the jeopardy proposed by any reinstatement of the Trump "dirty water rule" or a successful defense of its implications? Anyone want to testify to that? Anyone other than Mr. Ross?

[No response.]

OK. That is a pretty quiet panel.

All right. No one? OK.

How about the importance of investment wastewater? Anybody want to comment than? I've got 36 seconds left.

Go ahead, Mr. Witt.

Mr. WITT. Thank you, Chairman.

I would love to comment on that. It is absolutely critical that we continue investment in wastewater. And you have to look no further than things that happened in places like Jackson, Mississippi, to find out what happens when we don't invest in wastewater and in drinking water, as well.

In the industry, all of the NACWA members and people who aren't NACWA members pride ourselves on the jobs we do. You don't really hear about problems with wastewater plants, because they don't happen very often. But when they do, it can be catastrophic. And without the proper investment in clean water industry, it will start happening again.

I can tell you that at my place of employment, we have lines. As I said, we have been treating, providing public wastewater services

for almost a century now. We have sewer lines that are 100 years old. They were built by hand, by immigrants coming over from Europe, straight from Ellis Island, put to work and beautiful brickwork, beautiful woodwork, all these beautiful facilities. But they are not going to last forever. They have outlived their usefulness.

And that is the same all up and down the east coast. As you move further west in newer communities, you have newer sewer lines. But in particular where you have older sewer lines, in urban centers, and especially where disadvantaged people and people who do suffer the adverse impacts of environmental justice, you have got a lot of old infrastructure there. And these people are at risk. They are at risk. There is no other way to put it.

Mr. DEFAZIO. I thank the gentleman.

I thank the chair for her indulgence.

That was a very comprehensive answer. We are much at risk. Even when I was a county commissioner, we built the system with 85 percent Federal assistance. Still working great, but it is now 50 years old. That is a new one.

Thank you.

Mrs. NAPOLITANO. Thank you, Mr. DeFazio.

Mr. Rouzer, you are recognized.

Mr. ROUZER. Well, thank you, Madam Chair.

Mr. Ross, I was interested in your answer. And I know you didn't quite get an opportunity to fully, fully explain your perspective there. Do you want to go back to the chairman's question and elaborate just a little bit?

And my own comment, too, I think it is important that we have balance. You could shut down all industry, you could shut down all activity, and that would probably help clean up the water, too. But that is not obviously realistic, or even appropriate. You have got to have balance with this.

So, would you like to comment further, Mr. Ross?

Mr. ROSS. Yes, sure, thank you.

I recognize that there is passion, obviously passion, maybe the most divisive issue in the Clean Water Act.

But the number one point I want to make on that data issue is I think the Federal Government has failed for decades. We really don't have a resource map of our regulated waters. And I, like the Obama administration before me, we were sort of operating in the dark. And so, we started a mapping effort collaboratively with the Corps of Engineers, the Department of the Interior, EPA, and other Federal agencies to try to build that data.

With that said, it is a 10-year effort to build that data. And you do have to provide some clarity as to the scope of the Clean Water Act. And so, the Obama administration, the Trump administration, and now the Biden administration are trying to provide that clarity. That is a really, really difficult issue.

Mr. ROUZER. Speaking of clarity, it appears the EPA is rushing to finish their rule before the decision in the *Sackett* case. Based on your experience, do you think it is wise for an agency to be undertaking a rule about its own scope of authority when the Supreme Court is considering that very same issue? Shouldn't the EPA wait for the Supreme Court's ruling?

Mr. ROSS. Well, if I was there, let me answer it this way: I may make a different decision. But I do understand the drivers. So, I get the reasons why they are doing it. But I think the chance of providing—the Supreme Court finally providing some clarity is a good thing. And it would be nice have the Federal regulatory process match whatever decisions the Supreme Court may make.

Mr. ROUZER. So, the administration claims in its press statements that its part 1 WOTUS rule is just a return to the pre-2015 standard. Is this actually the case based on what you know?

Mr. ROSS. Well, I think we will have to see how they finalize the rule. The rule is now sitting over in OMB. I think some folks have made some comments about that.

I think it drifts a bit towards the 2015 rule. At least it did in the proposal. And so, we will have to see how it comes out in final. But I think it was more than a return to the 1986 framework.

Mr. ROUZER. Mr. Witt, I want to move to you real quickly.

PFAS is a big issue for us in North Carolina and elsewhere around the country. Can you discuss the impact that regulations might have on clean water agencies and other utilities as it relates to PFAS if those regulations are not given appropriate thought and balance and consideration?

Mr. WITT. Thank you, Ranking Member, for the question.

Yes, this is an extremely important issue for all clean water agencies. And we support, NACWA supports the further and ongoing efforts under the Clean Water Act to delineate and understand exactly the scope of the PFAS problem.

We have a real problem, and I personally have described this to my colleagues as having the potential to be catastrophic, cataclysmic, whatever word you want to use there, is the expansion of PFAS to be included as a hazardous substance under CERCLA, under the Superfund law, and the potential impact that could have on clean water agencies if there is not a congressional exemption for clean water agencies with regard to that definition.

Clean water agencies don't use PFAS. We don't make PFAS. We don't benefit from PFAS. We don't profit from PFAS at all. But if there is not an exclusion under CERCLA for wastewater entities, we are going to be held liable for it because we get it through the sewers. We are a passive recipient of PFAS. We can't stop it from coming in the sewer system, but now we might be held liable for discharging it when it goes through our treatment process. And nobody's treatment process at this point is geared towards removing PFAS.

The reason that we have the PFAS problem is because they are so biopersistent. It is very difficult to treat them, and there isn't even an agreed-upon treatment method yet. So, until that is developed, holding clean water agencies responsible for discharging PFAS is holding our ratepayers responsible for discharging PFAS, people who did not make them, people who do not benefit from them monetarily. But that is who will be asked to pay, in part, for those issues.

And that is why it is such an important issue to us to have the exemption under the law, if PFAS are included as hazardous substances.

Mr. ROUZER. Thank you.

I yield back.

Mrs. NAPOLITANO. Thank you, Mr. Rouzer.

I will now recognize myself for 5 minutes.

And I will start with Chairman Esquivel. It is great to see you again.

Much of California residents and farms receive water that starts as ephemeral or intermittent streams. If they are polluted, Californians will bear the cost of cleaning the water before it is drinkable, swimmable, and usable.

Can you discuss how important it is to protect them?

Mr. ESQUIVEL. Yes. I really appreciate the question.

And to maybe touch upon some of the discussion that we have been having around, and I appreciate the ranking member's word, "balance," for the protection of our beneficial uses. I will note many of California's waters originate within the State, flow within the State, don't cross interstate borders. And so, we use Porter-Cologne, our own authorities to regulate them and including expanding our definition for wetlands.

So, as this expanding and contracting jurisdictional discussion on the Clean Water Act happens, California can protect its waters and protect itself. But this has the most impact on our interstate waters, the Colorado River, here, front and center of many of our thoughts as we address the quantity issues on that river. But so, too, are important are the quality issues that, especially in a drying and arid climate, become so fundamental in the arid West to protect, to ensure that we are here as the basis or our economy is here truly protecting that and the polluters amongst that system are paying.

And so, there, ensuring that ephemeral streams which, again, especially in the West—I had the great fortune of being in DC for about a decade. So, I know the East and its water management can seem very different than what we have to manage in the West.

But our waterways are incredibly different. We have ephemeral streams. They don't free flow during the entire year. And they deserve protection, because when water does run down them, when we have storms, when we have—and especially with increasing and warming climate—floods, they can overwhelm and really impact our ability to continue to use our water as well.

And so, it is incredibly important that this jurisdictional issue be addressed and, importantly, we find some common ground here on how best we really lend ourselves to the science, the interconnectivity, the biological, as we have said, and chemical integrity of our waterways.

Mrs. NAPOLITANO. Thank you, sir. I yield to Mr. DeFazio, if you would like to have the time? Mr. DeFazio?

And then I will, again, Mr. Esquivel, many sanitation agencies in our State are working towards water reuse and recycling to address our drought conditions. What are the issues the State board is focusing on to support water recycling?

Mr. ESQUIVEL. Thank you, Congresswoman, Chair. Here, so proudly is the fact that the State Water Resources Control Board has actually been able to invest \$1.8 billion, along with importantly our local leaders and partners in water recycling projects in the State of California. That means in these next years, we will have

an additional 124,000-acre-feet of water, enough to support nearly 600,000 homes here with clean water. And with a warming climate, we know that we are going to have to continue to invest in these 21st-century systems, water recycling, and maximizing our use of our water resources, particularly, in the arid West. And there, it is an incredible thing that we are actually going to be, next year, adopting direct potable-reuse regulations, which will usher in a whole new generation of projects, not unlike water recycling did here in the early 1970S in California. We looked to be the leaders in ensuring that we are expanding our water supply portfolio, even as we adapt to what we know will be a hotter and arid future.

Mrs. NAPOLITANO. Thank you. Under the last administration, efforts were made for major rollback of protections under section 401, and the State board adopted its own wetlands policy in response to ensure continued compliance. Can you discuss the importance of section 401? Now, we've just got a few minutes.

Mr. ESQUIVEL. Yes, I will note that California, as I said during my remarks, we are really reconciling the system that we have inherited. And there have been a lot of decisions that have been made that have actually worked against having access to clean water and ensuring it for our communities, no more so than the paving over and development of 95 percent of the State's wetlands. So, that last 5 percent that we have left, the need to actually grow it, is so important and is why the definition for wetlands that are incorporating those protections in our policies was critical to responding to, again, these different jurisdictional issues when it comes to ephemeral streams or definitions of things, like the wetlands and the scope of 401 regulations.

And again, going to this theme of balance, here we have to remember that we are reconciling our systems. And on balance, we have to be protecting our communities and ensuring clean water. And that's the basis for our modern economies.

Mrs. NAPOLITANO. Thank you very much, sir. I will now move to Mr. Garret Graves. You are recognized, sir.

Mr. GRAVES OF LOUISIANA. Thank you, Madam Chair. Madam Chair, I want to join the chorus of folks, Ranking Member Rouzer, yourself, as well as Chairman DeFazio in celebrating some of the successes of the Clean Water Act. There is no question that the law has resulted in benefits to many communities and our environment across the United States in many cases.

I also want to highlight, because I think we need to stay focused on building on successes and addressing deficiencies.

Madam Chair, in my home State of Louisiana, we have lost 2,000 square miles of our coast—2,000 square miles of our coast—which are jurisdictional wetlands. They are jurisdictional wetlands. The primary cause of the loss is the very agency that is in charge of regulating wetlands. That would be the Corps of Engineers under the delegated authority.

So, there is something that we need to be, kind of, pausing on and thinking about. How has this law that is supposed to be protecting our wetlands resulted in the agency in charge of regulating them the greatest loss of wetlands in the United States history? And this isn't just historic, this is ongoing because of how they manage the Mississippi River system and our water resources.

No question, as Mr. Rouzer and our chairman have noted, no question there have been successes we need to celebrate. Gaping holes and failures that need to be addressed.

There is another one. I have heard folks talk about section 401. Section 401 certification certainly has a place in that, in that States need to have a role in looking at water resources, looking at certification, and ensuring that we are not carrying out actions at the Federal level that are adversely affecting our environment and adversely affecting States. However, we have got to look at the consequences of that and ensure that those decisions are confined to the intents of section 401.

We have watched, the States have come in, misapplied section 401 in ways to achieve their objectives related to climate change goals. And what I mean by that is blocking interstate gas pipelines. Ironically, their very efforts to use section 401 to achieve their climate change goals have actually resulted in greater emissions, resulted in consumers paying more for energy prices by blocking, for example, natural gas pipelines up in the Northeast only to watch Vladimir Putin go on Twitter and troll the United States because we chose them, the only option, to bring in liquefied natural gas from Russia.

It resulted in us having to burn home heating oil, which has greater emissions. These are boneheaded decisions that are clearly outside of the scope of the Clean Water Act.

Now, I heard Chairman DeFazio talking about the Clean Water Rule and the “dirty water rule,” which I am not sure what that is. I haven’t seen that one yet.

But I am curious, Mr. Ross, you have a very active Supreme Court case right now, *Sackett v. EPA*, that is before the Supreme Court. Clearly, the court, as it has multiple times, is getting ready to step in and effectively redefine, or at least put some parameters on the Clean Water Act, on WOTUS.

Based on your experience having served in EPA, why would an agency go out and do a final rule when they are getting ready to have a parameter change? And does that make sense? Or should we wait for the *Sackett* decision to then inform a final rule. Mr. Ross?

Mr. ROSS. As I said earlier, I may have chosen to make a different decision and let the Supreme Court act. We don’t know exactly—it is hard to predict what the Supreme Court is going to do. Is it going to provide the final clarity and overcome the mistakes of its earlier decisions in really disrupting the Clean Water Act jurisdiction and creating this confusion? Or is it going to rule more narrowly?

And so, to the extent they are moving forward, without the Supreme Court acting, I get it. Again, I might not have made that decision. And I do think it is more likely than not that we will get some clarity from the Supreme Court on some pretty important issues. And it will be nice to then integrate that into whatever Federal rule comes out after that.

Mr. GRAVES OF LOUISIANA. Thank you, Mr. Ross. Quick second question for you. In looking at the administration’s regulatory agenda, how they are carrying out regulations, yet, looking at how they are trying to similarly achieve infrastructure project comple-

tion or execution, things like implementing water projects across the United States. They are actually being hampered or impeded by the regulatory agenda. And I think that the Clean Water Act is an example of that in the need to modernize the regulatory process. If you can just quickly comment on the proposed waters, the U.S. regulations, and how it is going to impact much-needed water infrastructure projects.

Mr. ROSS. Well, I think there is a tension between the need to modernize our water infrastructure, our renewable energy infrastructure, whatever it is. The Federal permitting process is long, difficult, and expensive. And without clarity into the scope of jurisdiction, folks are having to grapple with how to go through the permitting process. And so, I think there is tension there, and tension that needs to be resolved.

Mr. GRAVES OF LOUISIANA. Thank you. I yield back.

Mrs. NAPOLITANO. Thank you very much, Mr. Graves.

Mr. Huffman, you are recognized.

Mr. HUFFMAN. Thank you, Madam Chair and Ranking Member, for holding this important hearing to recognize the 50th anniversary of the Clean Water Act. This very important act serves as one of our Nation's foundational environmental laws. It is an important tool allowing us to better protect our communities and our environment. But sadly, 50 years later, we still have to defend the communities' right to clean water and defend the Clean Water Act itself from attempts to weaken it.

Chairman DeFazio did a great job talking about how the Trump administration in 2020 tried to implement their "dirty water rule" to significantly limit the type of waterways that would even qualify for protection as well as the rights of States and Tribes under section 401 of the Clean Water Act. This, of course, is where they have the authority to review, certify, and potentially block harmful projects within their jurisdiction.

Now, thankfully, the Biden administration's proposed section 401 rule will further safeguard these important protections. But despite all of this, we may potentially see before us so-called permitting reform language from a Senate backroom deal. And what we know about this comes from a leaked American Petroleum Institute watermarked version of text that would weaken section 401 protections to significantly narrow the scope of projects that States and Tribes can review as well as to change the timeframe for them to conduct their environmental reviews.

And so, I would like to begin with a question to Ms. Tsosie. In your testimony, ma'am, you talked about how several Tribes have successfully used section 401 programs to regulate water quality. And you went on to say that if that section is weakened, many of those Tribes will lose one of the strongest tools they have to work with States and to weigh in on potentially damaging projects and ensure their resources are protected. Can you talk a little more about how a narrower scope, or a shorter timeframe, will impact Tribes in their ability to protect their water quality resources?

Ms. TSOSIE. Thank you, Representative Huffman. Section 401 is a strong tool for Tribal governments to review water quality and the impacts that projects will have on Tribal waters, both on and

off reservation. Narrowing the scope of that review in any way, such as narrowing the project review, narrowing the impacts that might be evaluated under that review can have significant impacts. These projects are not proposed in a vacuum. They often have secondary effects. Or they will have effects that if you narrow the scope can't be seen. And so, it is important that we look at the entire project's impacts as a whole as part of the section 401 process.

Further, shortening the timeline, or placing a timeline at all, really is an arbitrary move and can complicate the review of these projects, leading either to a denial where a project might otherwise have been approved, or an approval that falls short of protecting water quality standards. It also places an unreasonable burden on Tribes to do that review within that timeline. And so, that process has nothing to do with protecting the water quality, if we are placing that timeline there. Thank you.

Mr. HUFFMAN. Thank you. Chair Esquivel, same question to you, from the perspective of the State. What does it mean if the State only has 6 months to review a project instead of a year, or if a State is limited to only reviewing these quote, unquote, "water quality requirements of State law"? These are the type of restrictions proposed in the outline of this ideal that we have seen. Why is that a problem from the perspective of California water quality protection?

Mr. ESQUIVEL. Thank you. I appreciate the question. And I think we have to remember that we have here an inherited history of really bad decisionmaking. And while I appreciate and acknowledge that there is a tension around permitting, around getting the infrastructure investments that we know we need into our communities, and in doing so, at the pace that the urgency that climate change is really putting on us is important. But we can't afford ourselves here to continue to make bad decisions quickly. We have to be able to balance here, importantly, how we make the right considerations, how we evaluate projects in a way that, yes, we should concentrate on how we do that expeditiously, but also, how we do that well, and not put arbitrary timelines onto what are very difficult, and sometimes significant projects that need the time and consideration but can also deal with improvements around the way we look at data, the way we evaluate, we in common seeing what we need to best match up against our considerations for these investments.

Mr. HUFFMAN. All right. Thank you. I yield back.

Mrs. NAPOLITANO. Thank you, Mr. Huffman. Mr. LaMalfa, are you there? Mr. LaMalfa?

[No response.]

Then I will proceed to the next Member.

Mr. Malinowski, you are on, please. Mr. Malinowski.

Mr. MALINOWSKI. Hi, thank you so much, Madam Chair. Thank you to all our witnesses. And we are marking an anniversary here of a law that I think has done tremendous good for the American people. And as we look forward, I think it is important for us to look backward on what it has done.

Mr. Witt, you and I are both from New Jersey. I think we can talk forever about the changes that have occurred in our State over the last 50 years for the better because of the Clean Water Act.

And I think it is worth reviewing some of those. I think you mentioned in your testimony, that prior to the 1970s, the most common form of industrial, commercial, and residential wastewater treatment, quote, unquote, "was simply to discharge it with little to no actual processing into the nearest stream, river, lake, or ocean."

And we certainly experienced that in New Jersey in the early 1900s. For example, chemical and plastics companies like the American Cyanamid Company dumped hundreds of thousands of pounds of chemical waste into the Raritan River that flows through my district. At the height of World War II, industrial waste was regularly dumped into our Delaware River. It became basically an open sewer. It was said that the river's water was so dirty that it would turn the paint of ships running through the river brown. And today, there are kids and families swimming and tubing in that river in my district every year.

And along the Passaic, which, of course, you know very well, where industry boomed in the 19th century into the 20th, more than 100 industrial facilities have been identified as potentially responsible for discharging contaminants into the river according to the EPA.

Since then, since 1972, New Jersey, like many other States, has taken, I think, extraordinary steps to clean up our waters, to keep them clean. We are modernizing our aging water infrastructure, we are punishing polluters, we are defending the law at every opportunity, including during the previous administration when the law was on the chopping block.

So, I wanted to ask if you might be willing to reflect a little bit on that progress that we have made, and perhaps share some thoughts about where you see us going with the Clean Water Act for the next 50 years to deal with the very real challenges we still face in New Jersey.

Mr. WITT. Thank you for the question, Congressman. And I happen to live right across the street from the Congressman's district, and live near the American Cyanamid Project Superfund Site that the Congressman referred to. I live in Bound Brook, New Jersey, which is right where it is, it is right along the banks of the Raritan River. And, certainly, we have made a tremendous amount of impact in those areas and along the Passaic River.

I would, however, like to tie this back into the work that we still need to do. And as the committee, I am sure, is aware, Superfund law was created, in large part, because of New Jersey. New Jersey has more Superfund sites than anywhere in the United States.

And so, looking at the Clean Water Act and where we can go in the future is again the importance of continuing to fund infrastructure, not only New Jersey, but elsewhere, all around the country, in order to stop the continued pollution of these waterways. Because they are already at the point where it is too much. And we need to stop adding to the problem and start resolving the problem.

But again, getting back to the ranking member's point about developments with CERCLA, and certainly with regard to Congressman Malinowski's statement about the Passaic River, yes, that is exactly where Agent Orange was made for the Vietnam War, the defoliant that we used in the Vietnam War. And dioxin is one of the byproducts of making Agent Orange. It is basically the most

toxic substance that human beings know how to make that is not radioactive. And the company that is, by and large, responsible for making most of that dioxin just dumped it into the Passaic River.

We are now involved in the largest Superfund case in U.S. history along that river. There are some estimates by region 2 of EPA that it could cost as much as \$10 billion to \$12 billion to clean up that river. And at this point, 44 public entities—municipalities in New Jersey—45 public entities, including PVSC have been drawn into that lawsuit by the other polluters, because there is no exemption under the law for wastewater facilities.

So, you have got the situation now, where basically you have millions of customers who are going to be paying potentially for the privilege of having their river poisoned for the last 80 years. And we can't have that. There must be that exemption. That is where we need to go. We need to continue the regulation with the Clean Water Act, and account for new contaminants like PFAS. But we also need to realize that there is an action going on that needs to be fixed. You can't keep treating wastewater entities like they are part of the problem. We are part of the solution. We want to help. We are the troops on the ground.

Mrs. NAPOLITANO. Mr. Malinowski, you are out of time. Thank you, Mr. Malinowski.

Ms. Bourdeaux, you are recognized.

Ms. BOURDEAUX. Thank you, Chairwoman Napolitano and Ranking Member Rouzer, for holding today's hearing. As we get ready to celebrate the 50th anniversary of the Clean Water Act next month, I appreciate having this forum to highlight the successes of this landmark piece of legislation as well as discuss some areas of need for improvement. I am grateful to all of our witnesses for joining us for this important conversation.

Before I begin, I want to ask unanimous consent to submit a letter from American Rivers for the record.

Mrs. NAPOLITANO. So ordered.

[The information follows:]

**Statement of American Rivers, Submitted for the Record by
Hon. Carolyn Bourdeaux**

Since 1973, American Rivers has protected wild rivers, restored damaged rivers, and conserved clean water for people and nature. With headquarters in Washington, D.C. and 355,000 supporters, members, and volunteers across the country, we are the most trusted and influential national river conservation organization in the United States.

American Rivers is pleased to submit comments for the record in support of a strong Clean Water Act (CWA) to meet the nation's emerging water pollution challenges impacting rivers, streams, lakes, and wetlands. This bedrock environmental law lays the foundation for improving water quality by limiting sludge, sewage, and other toxic waste from entering our rivers. Yet with clean water supplies becoming scarce and polluted due to climate change, the mounting pressures of rising population, and sprawling development trends, the law has fallen short of its intended purpose. If we fail to embrace innovative solutions to strengthen it, state and federal agencies will struggle to deliver clean water for rivers, fish, wildlife, and communities.

In our recommendations, we highlight key opportunities to make the Clean Water Act more effective through improved enforcement measures, monitoring systems, and technological standards. American Rivers looks forward to working with the committee to formulate bipartisan solutions that brings this law into the 21st Century.

- Threats: Coal ash contamination
- 4. Maine's Atlantic Salmon Rivers
 - Threats: Dams
- 5. Coosa River
 - Threats: Agricultural pollution
- 6. Mississippi River
 - Threats: Pollution, habitat loss
- 7. Lower Kern River
 - Threats: Excessive water withdrawals
- 8. San Pedro River
 - Threats: Excessive water pumping; loss of Clean Water Act protections
- 9. Los Angeles River
 - Threats: Development, pollution
- 10. Tar Creek
 - Threats: Pollution

HOW THE CLEAN WATER ACT PROTECTS RIVERS

The Clean Water Act protects rivers and streams through the establishment of different permitting programs. The first permit system in the Act is the National Pollutant Discharge Elimination System (NPDES), which requires permits for any point source such as a discharge from a chemical plant, factory, or wastewater treatment facility, entering into "waters of the United States". This permit limits pollutants from contaminating or overloading waterways with dangerous chemicals that can alter or change the natural environment or harm public health.

The second permit system is established under Section 404 of the Clean Water Act and requires permits for the discharge of dredge and fill materials reserved principally for construction activities in, on, or around waterbodies. Additionally, Section 401 of the Clean Water Act requires that any applicant for a Section 404 permit also obtain a Water Quality Certification from the state in which the activity is occurring. The purpose of the certification is to confirm that the discharge of fill materials will be in compliance with the state's applicable Water Quality Standards.

The Environmental Protection Agency and U.S. Army Corps of Engineers, respectively, issue these permits, but the Clean Water Act delegates to the States the authority to make permitting decisions for activities that discharge pollutants to streams and wetlands within their borders.

Over the last half century, American Rivers has tackled some of the nation's greatest threats to water quality by working with state and federal agencies, wastewater utilities, community leaders, and scientists. Our network of more than 1.3 million volunteers participates in our National River Cleanup®, a key initiative focused on achieving national litter reduction goals in our waterways.⁵ Through this program, we have led cleanups across the country, covering more than 261,000 miles of waterways and removing more than 32.5 million pounds of litter and debris.

We believe a strong Clean Water Act allows us to continue working with state and federal agencies, local partners, and the public to achieve even greater victories for clean water and healthy rivers.

SUCCESS STORIES FROM ACROSS THE COUNTRY

The Clean Water Act today serves as a critical tool to preserve, enhance, and restore our nation's waterways. Below are success stories that exemplify the importance of the Clean Water Act when properly enforced:

- In *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*, the U.S. District Court for the District of Arizona invalidated the "Navigable Waters Protection Rule," a harmful rule, despite its name, which left many wetlands, lakes, and streams without critical clean water protections.
- Dominion, and its partner Duke Energy, canceled the proposed Atlantic Coast Pipeline due to popular local demand and community response. People from the region were able to utilize citizen input and response tools outlined in the Clean Water Act to make their voices heard. This a proposed 600-mile pipeline threatened water quality and vulnerable communities throughout Virginia and the Chesapeake Bay.

⁵American Rivers. National River Cleanups. See: <https://www.americanrivers.org/make-an-impact/national-river-cleanup/>

- The City of Burlington in North Carolina agreed to investigate the sources of per- and polyfluoroalkyl (PFAS) chemicals and 1,4-dioxane in the city's wastewater discharges.
- The Environmental Protection Agency charged the Montana Department of Environmental Quality to revise its narrative water quality standards to protect the state's waterways.
- The Wisconsin Supreme Court ruled that a 2011 law gives a state agency authority to enforce water quality standards through the use of CWA permit conditions for large agricultural operations known as concentrated animal feeding operations or "CAFOs."
- The New Jersey Department of Environment Protection upgraded protections for 600 miles of streams, setting stricter limits on pollution, and development. The upgrade means cleaner, safer recreational opportunities, and safeguarding rivers, streams and drinking water sources from pollution.
- The New Hampshire Department of Environmental Services was able to delist the Black Brook River from their CWA required impaired waters list. The removal of a century-old dam eliminated a source of water pollution and improved the health of the river.
- The California Central Valley Regional Water Quality Board worked with farmers on a grasslands bypass project to reduce Selenium in the San Joaquin Basin.
- Georgia's Environmental Protection Division removed a six-mile segment of Broxton Creek from the list of impaired waters. Farmers helped install best management practices on pasturelands to remove fecal coliform originating from animal agriculture and failing septic tanks. This led to improved water quality and fishing.

THE CLEAN WATER ACT IS WORKING BUT FALLING SHORT TO PROTECT RIVERS

For nearly half a century, the Clean Water Act has been successful at reducing pollution entering our rivers, streams, and lakes from point sources or single identifiable sources of pollution like wastewater treatment plants and factories. But rivers across America continue to be dumping grounds for human, industrial, and agricultural waste. And most importantly the places where pollution continues to be a problem are in communities where the Clean Water Act has not been properly enforced—communities where there has been a lack of investment in clean water infrastructure and other public amenities. The law falls short of serving its intended purpose in these cases because it is not being used or enforced.

Emerging contaminants and nonpoint source pollution also pose significant problems that are not fully covered by the Clean Water Act. These growing water quality threats need to be addressed if we, as a nation, are to have clean water for the future.

The Clean Water Act has driven critical improvements in U.S. water quality since it was passed. But as we move into the future, growing and evolving threats to clean water require the Clean Water Act to be strengthened. The next 50 years of the Clean Water Act must include effectively addressing the impacts of climate change, advancing environmental injustices, tackling CAFOs, nonpoint source pollution, and emerging water pollution problems.

Access to clean water is a necessity, not a commodity. To create a swimmable, fishable, and drinkable clean water future for all, we urge members Congress to support and strengthen the Clean Water Act.

RECOMMENDATIONS FOR STRENGTHENING THE CLEAN WATER ACT

The Clean Water Act protects millions of acres of wetlands and millions of miles of streams that feed into larger rivers, lakes, and other waterbodies across the United States. America's network of rivers stretches more than 12,000 miles—making it an essential economic engine for many cities and towns. But in 2020, the Trump administration introduced the Navigable Waters Protection Rule, aka the Dirty Water Rule, which severely limited the ability of the Clean Water Act to prevent pollution and protect critical wetlands, rivers, lakes, and other waters. The rule gave industry a license to pollute our waters, jeopardizing the health of our families and communities.

To reverse the damage done by the Dirty Water Rule, the Biden-Harris administration has released a new proposed rule that would reinstate longstanding guidance and protections. We hope that rule will be finalized soon. In October, the Supreme Court will hear arguments in a case called *Sackett v. EPA*, which will consider which waters should and should not be covered under the law. This case has the potential to greatly undermine the goals of the Clean Water Act and the ability

of the federal government to protect our waterways. We need to ensure that the public and members of Congress understand what is at stake in this case: our fundamental right to clean water and healthy rivers.

The Clean Water Act was passed with a goal to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters.” While the Clean Water Act, and the EPA’s efforts to enforce it have made gains in improving our nation’s waters since the passage of the act, there is still much work to do. We recommend the following:

1. Support a comprehensive definition of the “Waters of the United States” that includes small streams and wetlands as Congress intended when the law was amended and passed in 1972.
2. Support a scientifically robust review process under Section 401 to ensure states and tribes have the specific authority to condition or deny water quality certifications for infrastructure projects.
3. Direct EPA to update its technology-based limits for industry water pollution control systems as frequently and consistently as possible to protect public health.
4. Strengthen the Clean Water Act by closing its loophole for agricultural runoff and other “nonpoint” sources of pollution, which are by far the largest sources of impairments in waterways across the U.S.
5. Consider more consistent, universal guidelines for waterway impairment designations for all 50 states, and for gauging unhealthy levels of key pollutants like nitrogen.
6. Make it easier to effectively enforce key provisions and requirements of the Clean Water Act, including the cleanup plans—called “Total Maximum Daily Loads”.
7. Boost funding for the EPA and state environmental agency staff required to measure water quality, and to develop and implement the cleanup plans needed to bring impaired waterways back to life.
8. Require EPA to produce and publish an updated National Water Quality Assessment report, which they are required to send to Congress biennially under section 305(b) of the Clean Water Act. Congress should also require the EPA to update their data requirements to include improved information on stormwater pollution.

Our organization is fully committed to working with you on these timely federal water issues and appreciate your strong leadership. Thank you for your consideration.

ATTACHMENT

“AMERICA’S MOST ENDANGERED RIVERS® 2022”

The 23-page report is retained in committee files and is available online at https://www.americanrivers.org/wp-content/uploads/2022/04/MER2022_Report_Final_04062022.pdf.

Ms. BOURDEAUX. Thank you, Chairwoman. My district is home to a number of organizations that are on the cutting edge of water technology, including The Water Tower and the F. Wayne Hill Water Resources Center. The Water Tower is a nonprofit organization committed to creating an ecosystem of water innovation, which brings together public and private sectors, the water industry, as well as academic and policy experts to tackle challenges the water industry faces. The work of these organizations and other public, private, and nonprofit institutions across this country would not be possible if it were not for the Clean Water Act.

So, my first question is for Mr. Esquivel. And in your testimony, you mentioned the problem that California is having with harmful algal blooms, which I know is a concern for many members of this committee. We have similar concerns around Lake Lanier, which is in my district and provides 70 percent of the drinking water for the Atlanta metro area. I am pleased that a study on this issue was included in the House-passed version of WRDA. I was wondering

if you could expand on the impact HABs have and the process to mitigate these issues.

Mr. ESQUIVEL. Thank you so much, Congresswoman. I really appreciate the question. Recently, the San Francisco Bay suffered a red tide, a harmful algal bloom, not to human health, but certainly to fish, where we saw mass mortalities because of nutrient inputs into our waterways, into our water bodies. Those inputs come from wastewater treatment plants, that although are treating now the secondary standards, are effluent, and in many cases, in some cases increasingly tertiary, meaning the higher level of removal of nutrients and other pollutants.

We are still really challenged by harmful algal blooms. And with a warming climate, the heat is making these inputs all the more challenging for us. We are actually setting drinking water standards currently, notification levels for some of the toxins in harmful algal blooms for our drinking water systems as a response.

But we also have to get a control on the inputs themselves. As has been noted here in our discussion, nonpoint source pollution and our partners in agriculture and other industries, stormwater as well in cities, are the sources. And they are so much cheaper to clean up at the source than it is to have to then at the back end here like so many of our challenges invest and have fall upon our ratepayers the affordability issues.

There, the State is fortunate in that we have Porter-Cologne, which allows us to actually regulate nitrate discharges in agriculture. It has been a slow, but important relationship and process here at the State these last decades to really begin to develop the science that helps us understand what is an acceptable level of nitrate application for our partners in agriculture.

How do we ensure that we aren't here harming our ability to grow food and fiber, but, instead, improve our watersheds? And so, this nexus between nutrient inputs and harmful algal blooms is going to become all the more important, and so too are these solutions that we have amongst us to measure, to manage, and to work with our partners across in agriculture, to address these increasingly challenging issues.

Ms. BOURDEAUX. Thank you. And I just want to put a point on that, that we are seeing algal blooms in the drinking water of the Atlanta metro area and really do not yet have our arms around what is causing it, and how to prevent it, and what a large strategy needs to be. And so, I think, emphasizing that as we go forward is going to be very, very important.

Mr. Witt, I appreciate your testimony focused on water utility success stories. Gwinnett County's wastewater treatment facility, the F. Wayne Hill Water Resources Center, is an award-winning advanced wastewater treatment facility. It cleans and returns to the environment some of the highest quality wastewater in the United States. I see I am running out of time. But I just wanted to talk with you briefly. What is currently the biggest hurdle you see in the creation of clean water infrastructure?

Mr. WITT. It is funding, without a doubt. Treating wastewater is expensive. It is very energy-intensive. It is very resource-intensive. And as one of the other witnesses brought up today, we are at the point now where we are losing our best people to—I believe as Mr.

Ross said—well-deserved retirements. But the brain drain is incredible. And if we don't have funding for educational programs to start training people for these jobs—again, 1 out of 300 Americans are employed in the clean water sector, well-paying jobs, local jobs—getting the training for that, getting the money to build the infrastructure, getting the money to train the people to run that infrastructure are the two biggest hurdles.

Ms. BOURDEAUX. Thank you so much. I yield back.

Mrs. NAPOLITANO. Thank you very much, Ms. Bourdeaux.

And, next, we have Ms. Johnson. Ms. Johnson, you are recognized.

Ms. JOHNSON OF TEXAS. Thank you very much. And I would like to offer my opening remarks for the record, so I can go right to the questions.

[Ms. Johnson of Texas did not submit a prepared statement for the record.]

Ms. JOHNSON OF TEXAS. Mr. Esquivel, as we have seen in Flint, Michigan, and Jackson, Mississippi, poor and minority communities are hardest hit by a lack of investment in water infrastructure. And I am pleased your organization made it a priority to address this situation with the development of the racial equity plan. Can you go more into detail on why this was necessary and how successful it has been so far?

Mr. ESQUIVEL. Thank you so much, Congresswoman Johnson. When we have looked at the challenges that we face here at the 50th anniversary of the Clean Water Act, the inequities that still exist are so very linked to racial inequity. When we look at access to clean water and air means that it is really important that we as governments have a discussion around how we ensure that our programs are touching all of us, are ensuring that the benefit of access to clean water, both drinking water and sanitation, are a common benefit.

What we say in California, a human right to water and sanitation is pivotal and is actually part of our water code. So, having a discussion with our communities to understand what are the barriers to access, how we as government institutions ensure that there is equity in access amongst our communities is so critical. And especially because, unfortunately, we are inheritors of a history of explicit lack of extension of municipal services to so many of our communities based on race.

And so, it is incumbent upon us here in this moment to best understand the context of those challenges. As difficult as it is, especially as governments, to talk about race in a way that does credit to the complexity of this history that we are inheritors of. And it is not lost on me, again, that 50 years ago, these were fundamental discussions that we were having as a nation: access to clean water, access to clean air, the livability of our communities, and how racial equity was something that we were going to be able to achieve. And we have made strides, certainly, but there is still a long way to go.

Ms. JOHNSON OF TEXAS. Well, thank you very much.

Ms. Gatz, what other tools can we give to the States and municipalities to help address the clean drinking water? I know that someone said money, but are there other tools?

Ms. GATZ. Yes, there are options available under the Clean Water Act to address communities. One of the things I think that is helpful is the way that permitting is set up under the Clean Water Act. One of the tools that is available, the administrator or the delegated State authority, when they are issuing a permit or renewing a permit, they must consider the cumulative impacts, in a sense, because they have to look at the quality of the receiving water body, and whether or not that is meeting water quality standards.

So, as permitting authorities are looking to identify what limits should be allowed from a particular discharge of perhaps a new industrial facility, they must consider whether or not the water quality of their receiving water body is meeting standards or not. And then I would just echo, as others have talked about, the funding it and making it available in forms that can assist communities that are disadvantaged.

Ms. JOHNSON OF TEXAS. Thank you very much. I yield back.

Mrs. NAPOLITANO. Thank you, Ms. Johnson. Mr. LaMalfa, you are recognized. Mr. LaMalfa, you are recognized.

[Pause.]

You are muted. Mr. LaMalfa, you are muted. There.

Mr. LAMALFA. Yes. Thank you. OK. Thank you, Madam Chair. I appreciate your patience on that. And thank you for the hearing today. I am sorry. I am bouncing between committees here today.

So, I want to talk about some issues going on in far northern California with the water challenges we have, partly due to the actions taken by the Water Resources Control Board of California. And some of the things that they need to know about with what is—basically water [inaudible] stealing. Now, we have a gigantic problem with marijuana grows all over our State, but it is certainly—in L.A. County, Riverside, San Bernardino as well as a lot of it in Siskiyou County, Shasta County, Butte, and others. And the amount of water we are losing to these grows illegally is very significant.

So, at the same time as the water board is coming in and shutting down water to agriculture on the Shasta River Water Association, as their water diversions are beginning for crop season, they have to grow food for people. They had the farmers up there to plead to allow the use of the water for fire suppression and keeping their livestock they already have alive through watering. And so, they face penalties of \$500 per day for violating a curtailment, \$10,000 per day for violating the cease and desist. And the board is requiring a minimum flow of 50 cubic feet per second through the Shasta River.

So, the situation with the basically unregulated marijuana grows doesn't seem to get that same attention. So, the State board's priorities seem to look like farmers have their water taken away. Fire suppression probably won't get water from a nearby source. They would have to fly the helicopters and aircraft and others much farther away to get water. But the fish are guaranteed water. So, we have illegal grows. The water theft is basically being ignored. It is not being enforced. These grows are happening against county ordinance. They are happening against the size the State would per-

haps allow under legislation that passed. And they are certainly against Federal law. So, we've got a giant problem.

So, it has been publicized several times in the L.A. Times, for example. So, I would like to actually submit, for the record, Madam Chairman, these articles from the L.A. Times to talk about this very seriously on the marijuana grow problem around the State.

Mrs. NAPOLITANO. So ordered.

[The articles are on pages 67-81.]

Mr. LAMALFA. Thank you, ma'am. Thank you. So, Chairman Esquivel, why is the State spending its time and resources enforcing water diversions that have been going on for many decades in normal farming and ranching operations producing food as well as drinking water sources that you would have for these small towns up there, and instead the needs of the cartels setting up illegal water theft operations growing illegal marijuana are allowed to thrive? We have multinational cartels up there getting away with this as farms go dry, and even water for fire suppression is taken away.

Mr. ESQUIVEL. Thank you, Congressman. And I appreciate and acknowledge that we are in a historic drought. An incredible circumstance is up and down our watersheds. The State board itself currently is supporting over 2,200 households with hauled water throughout the State because of declining groundwater levels. So, managing our water resources in the middle of this drought is incredibly important. And if you look across the West, curtailment is far more a regular function of actually administering water rights. And, actually, this last year was the first time in California's history that we are actively administering water rights because of water levels being so low.

And I would note, though, that these curtailments largely protect senior water right holders in watersheds and is our here rational way of managing through what is incredible scarcity. I have to politely push back. It is not an either/or. If you look at the curtailment and enforcement work that the board is doing, we are also following up on illegal diversions from cannabis, and actually have here years of working with locals to try to best bring the folks that are coming to the legal space legally, and making sure that we are enforcing against illegal growths and, importantly, illegal diversions, whether it is cannabis or other diversions in the watershed in the middle of this incredible drought.

So, I welcome your interest in this. I would be glad to continue to follow up and explain the enforcement actions that the board is taking against illegal cannabis as one aspect of what is a multipronged drought response that includes putting our communities in the center of that response and ensuring they have access to clean water, as well as curtailing and as well as ensuring that the quality of our waters are protected.

Mr. LAMALFA. Well, I appreciate that. But everything I represent is north of Sacramento. So, I can't speak to how much the board might be enforcing in southern California. But we are not seeing it in the North.

Mr. ESQUIVEL. I have specific numbers. I can pull them up and share them certainly with you of dozens of inspections and current violations that we are pursuing. I have to be careful. I am actually

fire-walled from a lot of that enforcement work because I have my role here ultimately as a judge, if there are any disputes amongst that enforcement work. But I know, and we have statistics around, specifically in the Scott and the Shasta, and up in Siskiyou County, the enforcement work that we have been doing.

Mrs. NAPOLITANO. Mr. LaMalfa?

Mr. LAMALFA. [Inaudible] law enforcement on farming and ranching, but we need it for the marijuana site. The marijuana is running rampant with cartels.

Mrs. NAPOLITANO. Mr. LaMalfa, your time has expired.

Mr. LAMALFA. OK. I look forward to that information from Mr. Esquivel. Thank you.

Mrs. NAPOLITANO. Thank you, sir.

Mr. ESQUIVEL. I will follow up.

Mrs. NAPOLITANO. We are now recognizing Ms. Norton. Ms. Norton, you may proceed.

Ms. NORTON. I want to thank you, Chair Napolitano, for holding this important hearing, and Chair DeFazio for including my provisions, authorizing studies of swimming in the Potomac and Anacostia Rivers, and of a second drinking water source and increased storage capacity in the House-passed Water Resources Development Act. And I hope these provisions will be included in the final bill.

Mr. Esquivel, it is well-established that racial discrimination is pervasive in access to clean water resources. Communities of color are the most likely to be impacted by water pollution and denied access to clean, safe, drinking water. Could you explain more what factors are being taken into account as the California State Water Resources Control Board develops its racial equality plan, and are there factors that other districts may consider when working to combat racial discrimination in clean water access?

Mr. ESQUIVEL. Thank you so much, Congresswoman, for the question. And I think I will start by saying so much of our work, the most important part is actually seeing communities. There on the drinking water side, the leadership of the State water board, but importantly with communities, with water agencies, with Californians, developed a drinking water needs assessment where we looked at the technical, managerial, financial capacity of systems, their violations.

We at the State water board actually regulate nearly 3,000 water systems in the State of California. And altogether, we have somewhere—those are community water systems—we have 7,000 public water systems. And those vary from Los Angeles to San Francisco, very well-resourced large agencies, sophisticated agencies to those that are serving below 500 connections: smaller agencies, part-time boards, and a real challenge with access to clean water. And that nexus between racial equity and race and access to water, but importantly the data to actually see communities, not wait for systems to fail, not wait for a solution to be brought to us from communities that are struggling to provide other basic services that we know are disadvantaged in so many ways. It is unfair for the State to sit back and say the challenge is on you. And instead, so much of the work that we have done is about lifting up that lift experience through data and making sure then by having that data, we

can funnel funding, we can funnel discussions and consolidate systems across regions, which is really the long-term solution for so many of us. But that requires so much discussion and, importantly, putting people first, that it has been the resources that Governor Newsom has provided the board has really made the difference to see communities, to be part of discussions, and to lift up the challenges and experiences that so many of our communities have suffered under for decades.

I will say that has been so much of the important work as we pursue it is really on that data side.

Ms. NORTON. Thank you for that response. Ms. Gatz, bodies of water in the District of Columbia are affected by urban runoff and nonpoint source pollution. Since the Clean Water Act does not authorize the regulation of nonpoint sources, what can be done to increase regulation of these sources? Is a CWA amendment the best option or what is?

Ms. GATZ. Of course, Congresswoman, CRS doesn't take positions on the best option, but I can provide you with some options that are available to Congress in addressing this. Some proponents will argue that regulation of nonpoint sources is something that should be pursued, and that there is a disproportionate amount of pressure on point sources to reduce discharges. But others will argue that the observers believe that the best approach is to continue collaborative, stakeholder-based approaches that try to utilize financial assistance from the Federal Government, from Congress, through grants, technical assistance and other means to address nonpoint source pollution.

So, in those cases, an option for Congress would be to continue to support the types of programs that help manage nonpoint source pollution, like the Clean Water Act section 319 program, and some of the areas around the Nation, some of the Geographic Programs, the National Estuary Program can also help support such efforts. And even the Clean Water SRF, which we have talked a lot about today, also, does have eligibility for those types of projects as well.

Ms. NORTON. Thank you very much. I see my time has expired.

Mrs. NAPOLITANO. Thank you, Ms. Norton.

Mr. Carbajal, you are recognized.

Mr. CARBAJAL. Thank you, Madam Chair. And thank you to all the witnesses for being here today. Before I came to Congress, I served in local government as a county supervisor in Santa Barbara County. And I am very familiar with the role of the State Water Resources Control Board, and the balancing role that it has in trying to address the regulatory framework of all these water systems and yet try to do it in a balanced way that collaborates with those being regulated. And it is always a challenge and never easy.

Mr. Esquivel, I really appreciate your leadership and the role that you played in making the State board work collaboratively with stakeholders. On October 18, 1972, Congress took a historic step when it enacted the Clean Water Act into law. For the past 50 years, this landmark legislation has been responsible for protecting one of our Nation's most precious and finite resources from pollution: our waterways, including our oceans, lakes, and rivers.

Mr. Esquivel, as California continues to deal with the prolonged drought conditions, can you discuss how the State is dealing with this challenge?

Mr. ESQUIVEL. Thank you, Congressman. It is multipronged. We have communities that are running out of water because of drought. We have a need to administer water rights to ensure that we are not draining our watersheds to the last drop. And here managing through what may very well be another dry year because of a La Niña. So, the actions that the State is taking are ones of immediate response, certainly, making sure that our communities are supported; we don't have communities running out of hauled water, including those on domestic wells; setting up programs with our county partners, which are such a critical, key part of responding to the drought; but then, also, thinking about the long term, how we make investments in the next century's worth of infrastructure, including water recycling, stormwater capture, and groundwater recharge.

Governor Newsom, under his leadership, we just developed a water supply strategy that is trying to really quantify what is this aridification, this hotter, drier State that we are going to have to continue to adapt to. And where do we need to continue to conserve? And how do we also grow our water portfolio? And it is going to take, really, and it has been noted here, focusing on workforce development, focusing on bringing in the best and brightest minds to the challenges we are facing. And drought is one aspect of it, but it is also a future flood. It is also really being specific and, here, adapting our water systems to this new 21st-century climate that we know we have.

So, it has been on the immediate, it has been about responding to communities and the growing complexity there, but also about funding and shaping the policies that will help guide us through this next generation of projects, including direct potable reuse.

Mr. CARBAJAL. Thank you. The Bipartisan Infrastructure Law, which my colleagues and I helped draft, made available billions of dollars in supplemental funding for the Department of the Interior and the U.S. Department of Agriculture to address drought, wildfire, and ecosystem restoration needs. Specifically, we provided the Department of the Interior with over \$8 billion to help Western States like California.

Can you delve into how the Bipartisan Infrastructure Law has helped California continue to lead and comply with the Clean Water Act? Mr. Esquivel?

Mr. ESQUIVEL. Thank you again, Congressman. I think that as was noted, you dial back 50 years ago, and so much of the progress that we have had was because of the investments we made to actually achieve the water quality standards we were looking for from our clean water sector, wastewater treatment plants, and other folks in the industry.

And as we look forward now, the Bipartisan Infrastructure Law is a good downpayment for what is the need of a new generational reinvestment. Because of aging infrastructure, because of the pressures we know and have spoken of on climate change, and the inequities we see, it is going to take resources. And, regrettably, as we think of affordability, as we ensure that we can have sustain-

able systems into the future, that Federal investment, that backbone investment is so critical. And you see other sectors—transportation, energy, things that are so fundamental to our economies—be funded at the Federal level to help subsidize the pressures in our communities. And we saw a regression of that on the clean water side, on the drinking water side, from those historic investments in the 1970s.

Now is the time to—and as the Bipartisan Infrastructure Law has done is energize so many of the discussions, because with the resources to actually invest, it is bringing people to the table, it is bringing communities and other interested parties to figure out how we accomplish this huge goal.

Mr. CARBAJAL. Thank you. With the limited time, Ms. Tsosie, thank you for your testimony you gave—

Mrs. NAPOLITANO [interrupting]. You are out of time.

Mr. CARBAJAL. Since I am the last one, may I have 30 extra seconds, Madam Chair?

Mrs. NAPOLITANO. You may.

Mr. CARBAJAL. Thank you very much. Ms. Tsosie, thank you for your testimony today. Can you discuss what are the biggest challenges Tribes face in providing clean water to their communities?

Ms. TSOSIE. Thank you, Representative. There are several challenges. I am happy to get you and your office a list given the limited amount of time. But funding, infrastructure, and regulation are some of the biggest ones that I have noticed in my capacity.

Mr. CARBAJAL. Thank you very much, Madam Chair, I yield back.

Mrs. NAPOLITANO. Thank you very much, Mr. Carbajal. Miss González-Colón, do you wish to speak?

Miss GONZÁLEZ-COLÓN. Yes, ma'am.

Mrs. NAPOLITANO. You are recognized.

Miss GONZÁLEZ-COLÓN. Thank you, ma'am. Mr. Ross, as many of us here today know, Puerto Rico is still in the midst of responding to Hurricane Fiona which has dropped more than 20 inches of rain in part of the island. And it has continued to rain. And as of yesterday, more than 700,000 customers of Puerto Rico Aqueduct and Sewer Authority, PRASA, as we call it, are without drinking water service after the island was hit. Rivers are still overrunning their banks. And more than 112 filtration plants across Puerto Rico are not operating due to flooding. On top of the water issues is that electricity across the island is, again, down for the vast majority of people and services such as water treatment facilities, among others.

So, my question for you and the rest of the panel is this: What resources are available under the Clean Water Act in these emergency situations to ensure that my constituents will have safe drinking water available in the most efficient manner while response and eventual recovery are ongoing?

Mr. ROSS. Representative, thank you so much for the question. And our heart breaks for what is happening down there in Puerto Rico right now. I know we spent so much time—EPA spent a lot of time working to help the island of Puerto Rico recover from some of the last significant blows.

I will look at that in two-fold. I think there is significant funding on the Clean Water Act, both in some of the grant programs and long-term financing and flexible financing, including the new enhancements that have come out in the most recent round of legislation. I think the short term, I would also take a look at FEMA. There is a very, very significant pool of funding both in emergency response, but also in proactive future resilient building. And there was a fairly significant, over the last 5 or 6 years, modification to the FEMA funding opportunity. And so, I would really encourage Puerto Rico to spend a lot of time looking at resiliency funding under FEMA, in addition to the Clean Water Act and Drinking Water Act portfolio.

Miss GONZÁLEZ-COLÓN. And we are still managing that. Right now we are working with FEMA to have generators actually up and running those water plants. But we may not be able to have generators, all power, to all treatment plants on the island as soon as we want.

So, how can the Clean Water Act be best utilized post-hurricane recovery to mitigate against future losses and develop green infrastructure to help deal with excessive waters? Mr. Ross, can you help me with that?

Mr. ROSS. Yes, I do think—there is flexibility under the existing authorities in the State revolving funds, particularly, even with the loan forgiveness, but I think that that is particularly important down in Puerto Rico, to be funding the green infrastructure and to be looking at stormwater capture, not only as protecting public health, but also as new sources of water, right? And I think that is one of the transitions the water sector is going through right now is looking more holistically at rather than stormwater being an emergency thing that we had to grapple around, it is also finding a way to using green infrastructure to build more protective resilient communities, and also looking at capturing other sources of water going forward, whether or not it is a short-term emergency response or long-term viability of the island operations.

Miss GONZÁLEZ-COLÓN. Well, thank you. And, again, if anyone else on the panel would like to add anything, I just would welcome the input.

Mr. Ross, if Congress moved a disaster supplemental for those affected by Hurricane Fiona, in your experience, what should be included there to better mitigate against future disasters?

Mr. ROSS. Well, I really think, looking at that resilient—I think it is a set-aside out of every annual appropriation for FEMA for the emergency response. They can set aside 5 or 6 percent of the appropriation for future resiliency building. I think that is really innovative, and it is a way to be thinking about how can we build the resilient infrastructure so we are not recovering?

I do think we also need to be looking at—and I saw this, even when we were there, the speed at which the Federal Government can respond. The administrative State is difficult to operate in, and trying to find a way with a single lead to get all the agencies on the same page. So, I think that interagency coordination needs work in the future to be more responsive.

Miss GONZÁLEZ-COLÓN. Thank you. And for the final, how can implementation of that green infrastructure in the watershed help

protect water treatment facilities and critical water infrastructure during and post-natural disasters, such as Hurricane Fiona? Anyone on the panel?

Mr. WITT. Congresswoman, I will answer that question. Thank you for posing it. I think one of the issues is that, it is what you can build back with the FEMA funds. And I totally agree with Mr. Ross that FEMA is certainly where Puerto Rico should be looking right now, and that was the best source for help. But it is what you can build back with FEMA funds. And, unfortunately, PVSC in New Jersey has a lot of experience with this, as PVSC was completely wiped out in Superstorm Sandy a decade ago. And so, we are currently in the process of still rebuilding our facility from that devastation.

But in order for the funds to be really useful, what you need to be able to do is not only build back what you had and then protect that, but maybe build something better to begin with when you are building back, as opposed to just what you had. And removing restrictions on what you can and can't build going forward with using those FEMA funds may be a better way to go about it.

Miss GONZÁLEZ-COLÓN. Thank you. My time expired. So, I want to thank all the members of the panel. Madam Chair, I yield back.

Mrs. NAPOLITANO. Thank you, Madam. I am listening with great intent, but we want to make sure the Native Americans and the communities of color have more focus from especially the Army Corps and the EPA, as Ms. Norton indicated. It is time that they got recognition, that they have been overlooked. And we certainly want to celebrate the 50th anniversary of the Clean Water Act next month. And I think we have learned a lot from the highlights and lessons learned from the witnesses. And I thank them very much for their input. It was a good hearing. But I also want to thank the whole staff for putting it together for us.

And I ask unanimous consent that the record of today's hearing remain open until such time as our witnesses have provided answers to any questions that may be submitted to them in writing. And I also ask for unanimous consent that the record remain open for 15 days for any additional comments and information submitted by the Members or witnesses to be included in the record of today's hearing. Without objection, so ordered.

I also would like to thank our witnesses again for your valuable testimony today. It is very insightful and enlightening. And if no other Members have anything to add, the subcommittee stands adjourned.

[Whereupon, at 11:56 a.m., the subcommittee was adjourned.]

SUBMISSIONS FOR THE RECORD

Prepared Statement of Hon. Sam Graves, a Representative in Congress from the State of Missouri, and Ranking Member, Committee on Transportation and Infrastructure

Thank you, Chair Napolitano, and thank you to our witnesses for being here today.

Today, we look back on the impact the Clean Water Act (CWA) has had on our nation's waters since the bill's passage 50 years ago.

While progress has been made, plenty of work remains in order to accomplish the Clean Water Act's goals.

Unfortunately, we have consistently seen improper interpretations of the CWA result in the implementation of flawed, overreaching water policies.

This has hindered our ability to achieve the bill's underlying water quality goals.

There is no clearer example of this than the debate over the definition of a "water of the United States," also known as a "WOTUS," and the controversy over how to regulate these waters.

Decades of back-and-forth have created uncertainty for rural communities, farmers, business, and industries who rely on clean water.

Although the 2020 Navigable Water Protection Rule finally provided long-awaited clarity on the scope of WOTUS, the new Administration has decided to unravel this rule, once again creating confusion and chaos.

Today, I look forward to hearing more from each of you about the implications a return to a costly, burdensome, and broad WOTUS definition could have on local communities, in addition to your insights into what other work needs to be done to achieve the goals of the Clean Water Act we set about to achieve over 50 years ago.

Article entitled, "The reality of legal weed in California: Huge illegal grows, violence, worker exploitation and deaths," by Paige St. John, Staff Writer, Los Angeles Times, September 8, 2022, Submitted for the Record by Hon. Doug LaMalfa

THE REALITY OF LEGAL WEED IN CALIFORNIA: HUGE ILLEGAL GROWS, VIOLENCE,
WORKER EXPLOITATION AND DEATHS

by Paige St. John, Staff Writer
Los Angeles Times, Sept. 8, 2022, 5 a.m. PT

At sunset from atop Haystack Butte, the desert floor below shimmers with a thousand lights.

Illegal cannabis farms.

At this hour and distance, serene hues cloak the rugged enclave of Mount Shasta Vista, a tense collective of seasonal camps guarded by guns and dogs where the daily runs of water trucks are interrupted by police raids, armed robberies and, sometimes, death. So many hoop houses pack this valley near the Oregon border that last year it had the capacity to supply half of California's entire legal cannabis market.

Proposition 64, California's 2016 landmark cannabis initiative, sold voters on the promise a legal market would cripple the drug's outlaw trade, with its associated violence and environmental wreckage.

Instead, a Los Angeles Times investigation finds, the law triggered a surge in illegal cannabis on a scale California has never before witnessed.

Rogue cultivation centers like Mount Shasta Vista now engulf rural communities scattered across the state, as far afield as the Mojave Desert, the steep mountains on the North Coast, and the high desert and timberlands of the Sierra Nevada.

Residents in these places describe living in fear next to heavily armed camps. Criminal enterprises operate with near impunity, leasing private land and rapidly building out complexes of as many as 100 greenhouses. Police are overwhelmed, able to raid only a fraction of the farms, and even those are often back in business in days.

The raids rip out plants and snare low-wage laborers while those responsible, some operating with money from overseas, remain untouched by the law, hidden behind straw buyers and fake names on leases.

Labor exploitation is common, and conditions are sometimes lethal. The Times documented more than a dozen deaths of growers and workers poisoned by carbon monoxide.

The scale of the crisis is immense. A Times analysis of satellite imagery covering thousands of square miles of the state showed dramatic expansion in cannabis cultivation where land is cheap and law enforcement spread thin, regardless of whether those communities permitted commercial cultivation.

The boom accompanied a switch in cultivation technique, from annual harvests of outdoor plots to large, canopy-covered hoop houses that permit three to five harvests a year.

The explosive growth has had grave, far-reaching consequences, according to a Times review of state, county and court records as well as interviews with scores of local residents, legal and illegal cannabis growers, laborers, law enforcement, market analysts, community activists and public officials:

- Outlaw grows have exacerbated cannabis-related violence, bringing shootouts, robberies, kidnappings and, occasionally, killings. Some surrounded residents say they are afraid to venture onto their own properties.
- Laborers often toil in squalid, dangerous conditions and frequently are cheated of wages. In four counties alone since legalization, carbon monoxide from generators and charcoal braziers has killed seven workers as they labored or tried to stay warm in sealed greenhouses on illegal farms, and eight more inside uninhabitable buildings, coroner records show.
- Intense cultivation is causing unmeasured environmental damage. Millions of gallons of water are being diverted at a time of severe drought, pulled out of aquifers even as the wells of local homeowners go dry. Unchecked chemical fertilizers have been deployed, along with banned, lethal pesticides.
- The immense scale of illegal cultivation fed a glut that crashed wholesale prices last year, jeopardizing even those in the licensed market. Small-scale legal farmers unable to sell their crop have been pushed toward financial ruin.

The pitch for Proposition 64 focused on grand benefits: an end to drug possession laws that penalized the poor and people of color, and the creation of a commercial market that in 2021 generated \$5.3 billion in taxed sales.

But California failed to address the reality that decriminalizing a vast and highly profitable illegal industry would open the door to a global pool of organized criminals and opportunists.

For those sidestepping taxes and regulation, the reduced criminal penalties included in Proposition 64 lowered the cost and risk of doing business.

Although no hard data exist on the size of the illegal market, it is indisputably many times larger than the licensed community. The Times' analysis of satellite images shows that unlicensed operations in many of California's biggest cultivation areas, such as parts of Trinity and Mendocino counties, outnumbered licensed farms by as much as 10 to 1.

Butte County, at the northern end of the state's Central Valley, tried to ban commercial cultivation, but the area covered by cannabis greenhouses in Berry Creek soared 700% in five years. Ravaged by wildfire, it is not rebuilt homes but the shiny plastic of greenhouses that gleams between the charred black skeletons of the forest.

Neither a ban nor lack of water dissuaded outlaw growers from erecting hoop houses on the desert sands of Lucerne Valley, where the state mapped 13 cannabis plots before legalization and The Times last year found 935 greenhouses. A still-running campaign by the San Bernardino County sheriff in 12 months razed more than 8,200 greenhouses without running out of targets.

California has done little to address the crisis.

Enforcement efforts against the illicit market are spread across a variety of state agencies with insufficient resources and very different priorities. Seven years after water regulators set out to map and measure the impact of cannabis cultivation in California, the work remains unfinished.

Under Gov. Gavin Newsom, a champion of legalization, California has subscribed to an industry-backed theory that market forces will eventually squeeze out illegal growers. When licensed growers this year complained they could not compete, Newsom agreed to tax breaks and his administration created incentives to expand the market by giving grants to communities that allow commercial cannabis.

At the same time, he increased the penalties against those that don't. Communities that prohibit commercial cannabis are already barred from key state enforcement grants. A measure written into Newsom's budget bill also blocks them from the closed-door meetings of a task force set up to advise the governor's administration on cannabis policy, including what to do about the illegal market.

Illegal cannabis' thorniest challenges fall on overwhelmed local law enforcement agencies and code enforcement departments, ill-equipped to contend with criminal networks behind the growth.

The rugged forests and valleys of Mendocino County, deep in the heart of California's famed Emerald Triangle, renowned for the quality and quantity of its weed production, have an estimated 5,000 illegal cannabis farms. The grows range from homestead farms to dangerous drug-trade operations, such as one where deputies this spring found an AK-47 modified for full-automatic fire.

The sheriff's cannabis enforcement team consists of a single sergeant and a part-time deputy. They try to identify the worst offenders, borrow officers from neighboring counties for raids and ignore the rest.

"It's like taking on a gargantuan army with a pocket knife," said Sheriff Matt Kendall.

Noel Manners' licensed farm had a problem—too much cannabis.

Regulators in 2020 sent satellite images that showed large hoop houses on his Mendocino County property that were not permitted under his state cultivation license.

But Manners knew the offending weed wasn't his.

A large illegal grow had crept onto his 800-acre timber tract. Manners waited for winter, when he knew the operation would be dormant, and hiked up the hillside. He found trees felled for a half-acre clearing, three giant plastic-covered hoop houses, and—especially repugnant because the longtime grower was a leader in organic cannabis farming—chemical fertilizers spilled on the ground.

Manners shoved the outlaw operation back across his fence line with his mini-dozer. It returned the next spring—with unwelcome signs of activity.

Soap suds frothed in his mountain pond. Gunfire echoed at night. Walking his land one rainy day, Manners smelled something foul.

"I saw these little white, almost like, flowers on the ground," he said.

He was standing in a field of toilet paper.

Manners, 63, was a pioneer in cannabis, a former bicycle shop owner with a laid-back smile and the habit of hanging his eyeglasses on the collars of his Grateful Dead T-shirts. He left the Sacramento Valley three decades ago to move his family to this remote mountain overlooking Round Valley.

He joined the generations of growers who dodged the law while building an economic and social fabric that filled the void left by the collapse of the timbering industry.

When California led the nation by legalizing medical marijuana in 1996, he and other farmers became part of a gray market—one that fostered sham medical recommendations and farms of 99 plants, one less than the federal threshold for a mandatory five-year prison term. Absent state regulation, permitting took the form of zip ties sold by the sheriff to identify legal plants and protect them from raids.

Manners successfully navigated every shift in California's unstable cannabis landscape. He developed strains that would help form the foundation for today's industrial growers. High Times, the counterculture magazine dedicated to weed, heralded his off-the-grid operation, Camp Cool, as one of the nation's premier sun-grown cannabis farms.

The interlopers on his mountain made Manners uncomfortable. He would not go near the grow if it was occupied. But he could not avoid them.

Manners met growers cutting through the woods, one carrying an assault rifle. Another had a bandanna over half his face.

"I pointed at them and said, 'This is my land. I'm the one who put up the 'No Trespassing' signs and whatnot last year.' And then I asked them, 'So how long, when are you guys going to be finished and be off of my land?'"

"And they said, 'Oh, 10 weeks . . .'"

"And I said, 'Good enough.' That was my cue to leave."

In July 2021, Mendocino County sheriff's deputies finally raided the operation.

Manners returned to the site this winter, and discovered the operation still standing. Three enormous hoop houses stood ready, each the length of two houses. Three

giant Doughboy swimming pools were set up for mixing chemical-laden water for “fertigation.”

“They’re getting ready for another expansion,” Manners said as he documented the grow with his phone, his gray ponytail reflected in the glass of the abandoned truck. He pointed out an overturned truck camper top, and enclosures made from black plastic hung from the trees—makeshift toilets.

Manners died unexpectedly in early April, falling and cracking his head after the main artery from his heart suddenly tore. His brain swelled and he did not regain consciousness after emergency surgery. Afterward, his son noticed something uncharacteristic on his father’s nightstand: a .44 magnum pistol.

A coiled belt of bullets sat on the shelf below.

In the run-up to California’s 2016 watershed cannabis vote, Mouying Lee positioned himself at the forefront of a wave.

He moved from Fresno to Siskiyou County’s high desert to snap up scores of cheap lots in a failed vacation resort called Mount Shasta Vista, little more than a spiderweb of cinder paths bulldozed between lava rock and juniper scrub.

Then Lee sold most of the dusty, empty plots to Hmong like himself. Hundreds moved from across the United States to the area populated mostly by white hay farmers and cattle ranchers.

The would-be entrepreneur described his vision of a cultural center for his people, Laotian refugees persecuted for siding with the U.S. during the Vietnam War.

But in the dry volcanic valley, punished by sun and desiccating wind, the newcomers built virtually no homes. They slept in sheds, or beneath tarps, and tended 99-plant gardens of cannabis, one leafy stalk short of the federal cutoff for prison. When the snow arrived, they and the harvest disappeared.

Similar cannabis-centric enclaves emerged across Northern California, often named after Laotian mountains or battlefields. They were controversial in the Hmong community, but even critics said the farms provided a steady flow of cash to a struggling population of immigrants.

Lee said most of the cannabis in Mount Shasta Vista was grown for personal use and “the old way of medicine,” such as brewing cannabis tea and putting it in the shower for steam baths. He voiced dismay that Siskiyou County’s more established residents accused the Hmong arrivals of organized crime.

Law enforcement frequently intercepted shipments of hundred-pound parcels of cannabis sent from the Mount Shasta Vista farms. The sheriff’s posse mounted dawn raids and the county Board of Supervisors passed ordinances that not only banned commercial cannabis but the water deliveries that kept the grows green.

Lee said it was a cultural misunderstanding, if not overt racism.

Court filings show Lee was central to a highly organized cannabis operation. Investigators raiding his houses found water delivery schedules and receipts for dues for a 534-member association. The files tracked members’ medical marijuana cards and voting records as well as search warrants executed by the sheriff. An investigator alleged the organization even insured members against losses from raids. In texts admitted into the court record, Lee brokered cannabis sales by the hundreds of pounds to buyers flying in from afar.

With the opening of the recreational cannabis market, Lee expanded beyond his Hmong clientele. He bought large parcels outside Mount Shasta Vista, bulldozing one 620-acre tract so barren the scar is visible from space. Dubbed the “Cinder Pit” by police, it contained 82 plots, each with two greenhouses and a shed. Tenants arrested during drug raids told police they had leased their plots for \$10,000 a season.

It was not the sheriff but a tax agent who stopped Lee’s expansion.

In 2020, with help from the California Franchise Tax Board, county authorities charged Lee with money laundering and tax fraud, accusing him of hiding some \$1.5 million in unreported earnings. Lee pleaded not guilty. Prosecutors asked a judge to set his bail at \$3 million, but Lee was released on his own recognizance.

Even with Lee sidelined, the expansion of cannabis farms in Mount Shasta Vista continued, attracting other groups who spilled out across the valley of Juniper Flat.

Single-family plots gave way to multi-season greenhouses. Some built industrial-scale complexes that made the small Hmong camps look timid.

“I never thought it was going to be like that,” Lee said this spring as he paced the upper balcony at the courthouse, waiting for his Beverly Hills lawyer to fly in for settlement talks with the county prosecutor.

At night the cannabis camps glow like a small city. The Times mapped more than 1,300 farms in Juniper Flat last year. Their greenhouses covered more than 10 million square feet, a 4,200% increase since 2018.

It is the densest known concentration of illegal cannabis cultivation in California.

Once the dominion of ranchers and retirees, the valley has taken on outlaw qualities. Lookouts are posted at entrances off the highway. Armed robberies are fre-

quent. In 2018, deputies seized seven guns during raids on illegal farms. Last year, they found 66. This spring, police were summoned to one farm to fetch two intruders left tied to a fence post.

Last month, four men who appeared to be in their 30s surrounded a Times' photographer parked along the public highway outside Mount Shasta Vista where he had stopped to document water trucks in the distance filling up at a hay farmer's well. One of the men took out a tire iron and began hitting the photographer's car, denting the body and smashing the rear windshield and a sideview mirror.

Another told him: "The only reason you don't have a bullet in your head right now is because you are talking to me."

Two years ago, masked assailants attacked a Mount Shasta Vista grower and his companions, tied them up and killed the grower. Police suspect it was an execution. It remains unsolved.

Also that summer, three men from Southern California carrying AR-15-style assault rifles tried to rob growers. In the ensuing shootout, one of the men was killed and his wounded accomplices fled on foot through the rocky cannabis farms, calling 911 to beckon police to their rescue. That killing also remains unsolved.

So do the killings of two Hmong women from Milwaukee in 2019. They were shot on a cannabis farm near the Oregon state line, where another enclave has settled, rarely visited by police.

Since 2016, at least eight cannabis growers in Siskiyou County have died of carbon monoxide poisoning as they tried to keep warm with charcoal braziers and unventilated generators, according to coroner records obtained by The Times. The body of a ninth carbon monoxide victim was found last year dumped on the side of Interstate 5, wrapped in his sleeping bag. Police have no clue where he died, but they presume it was a cannabis operation. Six of the dead were Hmong.

Det. Sgt. Cory Persing commands the county drug enforcement unit, wrestling not just with cannabis but fentanyl, meth and everything else. The five-person unit is down to two, Persing and another sergeant, so they must call for volunteers from the jail to staff raids.

Because of the Proposition 64 prohibition barring counties that do not permit commercial growing from state enforcement grants, they rely on funding from the federal Drug Enforcement Agency.

The ballot measure also dramatically lowered the cost of business for illegal operators, reducing the criminal penalty for unlicensed cultivation from a felony punishable with time behind bars to a \$500 misdemeanor no matter how large the crop. To bring a felony case that might shut down an operation, state prosecutors must find other charges. That requires investigators.

Persing has none.

He is caught in an endless cycle of writing search warrants and ripping out plants. Nine out of 10 grows go untouched. He has returned to raided farms three days later to find them back in operation.

On a sunny day in October, Persing's team hit four small growing camps. Alerted by the lookouts, the growers had fled by the time the convoy arrived. Only a penned dog was left, snarling and snapping, a pile of dry food on the ground kicked through the bars as though even its owners were afraid to get close.

Officers used a mini-dozer to raze cannabis beneath a hoop house built out of PVC pipe, while Persing peered inside one of the plywood sheds used for habitation. He laid the search warrant and a receipt for 157 pounds of seized cannabis on a mattress set on two-by-fours, beside an empty rifle case.

An outdated watering schedule hung on the unfinished wall. The shed held personal financial papers for at least four people, and an offer to buy 70 acres in eastern Oklahoma where there is a cannabis land rush. A garbage pail and a plastic bucket in a makeshift stall suggested a shower. A single-burner camp stove suggested cooking, but there was no food.

Persing stood on the ridge road, sunglasses perched atop his close-cropped head, and pointed out Mount Shasta Vista.

Then he used his arm to trace the expansion since 2019. In the valley below, the white forms of hoop houses stretched for miles.

"This is all of the new stuff," Persing said, sweeping his arm east across the valley. "I mean, like, prior to this, there was one house up in here. It has just grown, swoosh, all the way around."

Some cannabis camps empty their pit toilets onto the ground and trash into other holes. When the wind blows, empty fertilizer bags wrap themselves around fences like tumbleweeds. Growers have bulldozed parcels flat, scraping away vegetation, and the land is cut by deep erosion scars littered with empty water totes and growing piles of detritus. With the market collapse, some of the hoop houses are aban-

done, and dogs that once guarded the farms now run in packs that sometimes attack cattle, and are frequently found dead or starving.

“All of that’s illegal. Nobody seems to care,” said Persing, exasperation wearing on his voice.

Beyond Highway Patrol and wildlife officers who sometimes lend a hand with physical labor, Persing said, “we don’t get much help from any state agency.”

Struggling licensed cannabis growers like Mary Gaterud also feel abandoned.

She is part of the cultural movement that was at the core of California’s early cannabis industry.

Gaterud earned a master’s degree in existential phenomenological psychology, took a look at her job prospects in the late 1990s, and thought, “Yeah, I think I’m just going to drop out and grow weed.” She set up a small outdoor cannabis farm in Humboldt County on the banks of the Eel River.

Her plants are organically nurtured in microbe-rich soil and mulched with a winter cover of fava beans. She spent years developing sweet-scented stocks, grown herself from seed, so that when she pops opens a harvest tub in her state-inspected processing facility, a converted root cellar, the smell is heavy with pineapple and coconut.

Her harvest fell victim to a glut in cannabis that drove down wholesale prices. A pound of dried flower, which just a few years earlier would sell in California for more than \$2,000, was now worth less than \$300. If it sold at all.

Late last year, as Gaterud cut the summer’s harvest, her distributor in Los Angeles shipped back her 2020 crop, unsold and so damaged by poor storage Gaterud wasn’t even sure it was hers.

There was nothing else to do with the premium plants but ship them to an extractor to be mulched and reduced to generic oil.

Gaterud and many other small farmers now face financial disaster.

“I’m barely hanging on,” she said.

The glut was driven by two factors: the surge in illegal growing and the state’s issuance of licenses to grow more cannabis than Californians consume.

Nicole Elliott, the governor’s cannabis advisor and the head of the Department of Cannabis Control, said she believed California’s licensed cannabis crop was about 3.6 million pounds, in a state that consumed less than 2 million pounds.

The Times’ analysis of state licensing records and production estimates put the state’s 2021 legal crop at well more than 7 million pounds, even accounting for crop failures and growers who did not plant.

Asked about The Times’ findings of increased illegal cultivation, Elliott said: “Do I think it’s worse? I honestly couldn’t say one way or another.”

Elliott said ensuring the integrity of the legal market is her first focus “before we expand those efforts out to the illegal market.” Other state agencies, she said, are better equipped to contend with illicit grows.

Still, she said, “it’s not like we’re sitting on our hands doing nothing.”

In July, the department issued a news release heralding the removal of illicit cannabis from the market, but detailed warrant logs obtained by The Times under California’s public records law show most of those seizures were led by other police agencies. In the year since July 2021, the department’s 59 sworn officers have initiated only 26 of their own warrants against illicit growers.

The department’s enforcement chief told The Times he was unable to provide a list of criminal cases that resulted from those efforts.

The logs show most of the division’s focus is on urban areas and Southern California. In that same time frame, the Department of Cannabis Control enforcement actions in Mendocino County—beset with violent, large-scale criminal operations—were limited to a single day of raids on four small farms along a creek, at the behest of wildlife officers. There were no arrests.

The remainder of state enforcement is fractured and limited in focus. National Guard teams still conduct summer raids that slash plants, but they remove less than a quarter of the crop of eradication campaigns a decade earlier. The state water resources boards were front-runners in approaching illicit cannabis as an environmental threat, but when fees from cannabis permits fell short of budgeted projections, the boards in 2020 cut their cannabis enforcement departments by half.

The biggest state player in combating illicit cannabis is the Department of Fish and Wildlife, which focuses on the impact growers have on streams and fauna.

Cannabis growing that endangers either remains a felony. But the 68 Fish and Wildlife cannabis field officers who have the expertise to document those crimes are spread thin. Nine agents cover the seven-county area responsible for an estimated 40% of illegal cultivation.

State regulators have had authority since 2019 to fine unlicensed growers up to \$30,000 a day, and to seek civil penalties that can exceed \$300,000 a day.

Although the state has sanctioned licensed growers for violating regulations, The Times found the state attorney general has never invoked civil penalties for unlicensed cultivation. The Department of Cannabis Control used the tool once—against a Shasta County school janitor and his wife accused of leasing their land for nine illegal greenhouses.

Elliott could not explain why the case was filed at all. She said it was a departure from what she believed department priorities should be.

Other states experiencing rampant outlaw activity have taken more aggressive measures. In Oregon, the problem prompted a special session of the Legislature to step up police raids and services for exploited workers. Oklahoma’s attorney general is investigating law firms accused of helping growers skirt residency requirements.

Gaterud, on her farm deep in the mountains of Humboldt County, said she feels betrayed by California and angry that she suffers while those flouting the law go unstopped.

Regulators, she said, repeatedly demanded detailed drawings of her farm’s plans and conducted nine separate inspections. She estimates she spent \$100,000 on fees and improvements to her property to meet local and state requirements.

As the winter rains set in, she began borrowing money from friends and relatives to live on. She got a part-time online job as coordinator of an astrology school to make ends meet.

Her 2021 crop came back from the distributor, also unsold.

“I’m afraid that I am one bad piece of news away from having to list my property,” she said, “and abandon my dream, life, everything I have fought for.”

In the summer of 2020, Julian “Terps” Sanchez left his Orange County apartment for long buying trips in Northern California to scour illegal farms for 100-pound boxes of processed cannabis buds.

At home, his father, a former meth distributor named Miguel Sarabia, used a strip mall cellphone and satellite dish franchise in Lakewood to build a clandestine lab to make distilled oil for edibles and vaping cartridges imported from Hong Kong.

The father and son represented the connection that enables illicit growers like those in Mount Shasta Vista to reach a national market.

Sanchez supplied a Milwaukee operation some 250 pounds of cannabis a month, and his father provided thousands of vape cartridges, according to plea statements and other court filings. In just six months, the California wholesalers were paid an estimated \$1.7 million, much of it sent through the mail with bills painstakingly taped between the pages of magazines. It was a low-risk drug that commanded high street prices, especially sold as vape cartridges, Sarabia’s defense lawyer said, making cannabis more attractive and more lucrative than cocaine or heroin.

On the Milwaukee side, affidavits and plea statements filed in federal court detail stash houses, business fronts and large weapons caches that included untraceable “ghost guns.” The arsenal of one woman, who gathered family members in a basement to assemble vape cartridges, included a baby blue Glock on her dresser and another Glock in a baby bassinet. The ring’s local leader was a Mexican Posse gang member who, an informant told investigators, twice boasted of shooting a “snitch.”

Sarabia had his eyes on the expanding world of legal cannabis. Should Wisconsin approve recreational cannabis, he claimed on a 2020 wiretapped call, influential political connections guaranteed Sarabia a wholesale license. He had already bought the building.

“I’ll be the first one,” he boasted.

Federal and state investigators in Wisconsin shut down the trade in late 2020, charging 26 defendants. Sanchez pleaded guilty to drug and gun charges for a 10-year sentence. Sarabia admitted to a single drug conspiracy charge and was given five years in prison. None of the farms supplying the drug ring were identified.

Few ever are.

Police and prosecutors told The Times that cannabis-related crimes are a low priority, even in the federal court system, where cannabis is classified the same as heroin and LSD. They described unwritten hurdles their investigations must clear—such as proof of laundering millions of dollars—before superiors will approve money and time to prosecute. In the rare instances when charges are filed, they generally don’t target the people who head or fund the operations.

Federal justice officials in 2018 heralded investigators who used utility bills and tracking devices to identify some 130 indoor grow houses in Sacramento run by a network of buyers who wired money from China. Nearly half of the 21 people charged were Chinese citizens.

Five years after the first arrests, most of those charged have yet to go to trial. The operation’s leaders weren’t identified. A federal official connected with the case, who was not authorized to speak publicly, said Chinese authorities won’t cooperate

on such investigations and U.S. Justice Department supervisors in Washington, D.C., did not give the green light to continue digging.

The best hope, he said, was to seize local assets and “disrupt the finances . . . and put pressure on whoever is organizing this stuff.”

Nearly half of the money for the grow houses came from local private investors who made high-interest loans to buyers with few obvious financial resources. Court records show the lenders included a Sacramento physician who told the court he hated cannabis, but was unwittingly steered into underwriting illegal grow houses by a real estate agent now charged in the conspiracy. And, he said, it was very profitable.

Federal prosecutors allowed him, as they do with other such lenders, to recoup his money when the property sold, even though a forfeiture motion remained pending.

In one of the few federal cases that resulted in a conviction for illegal cultivation, probation officials recommended four years in prison for Aaron Li.

Li, who has a PhD in vision science from UC Berkeley, used money from unindicted conspirators in China to turn nine suburban homes in San Bernardino County into clandestine grow houses. Court records laid out the mechanics of a sophisticated scheme that ran until 2019, involving stolen electricity, straw buyers, fake leases, purloined passport information and money moved from China to shell companies in the U.S. One of the participants was a confessed money-laundering courier for a Mexican narcotics ring.

Li’s defense lawyer told a judge that his client was acting under orders from unnamed bosses he feared, a claim she repeated to *The Times*.

U.S. District Judge George Wu initially announced an eight-month sentence. After Li said that he had young children, the judge reduced it to six months.

“Marijuana is being cultivated legally—it’s just a question of getting the licenses,” Wu said during sentencing. “There’s so much of it. So why would I impose a lengthy sentence?”

A federal prosecutor in the case said there was no interest in investigating beyond Li, saying the case had met its primary goal, shutting down a community nuisance.

State Assemblyman Thurston “Smitty” Smith (R–Apple Valley) this winter proposed restoring felony charges for large-scale growers but, with no co-signers, he yanked the doomed bill before its first hearing. His substitute measure to increase civil fines passed the Assembly but failed to progress in the Senate.

A growers’ group, the California Cannabis Equity Alliance, called the proposed increase in fines “a symbolic deterrent that will be good for a press release and little else.”

“The potential profits to be made are too great.”

In the bowl of a beautiful and tragic valley bordered by the Eel River in Mendocino County sits tiny Covelo.

It was the site of California’s largest state-financed massacre—a campaign that in 1856–59 slaughtered more than 1,000 Yuki tribal members—and the destination for the U.S. military’s forced march of five more tribes. Remote and at times unreachable, the community has struggled since the downturn of the timber industry and closure of the local flour mill.

But Covelo had cannabis.

Small outdoor cash crops were common on Round Valley’s patchwork of private, federal and reservation lands. Mendocino County and the tribes were tolerant, even if the U.S. Bureau of Indian Affairs did not approve.

After legalization, outsiders rolled into the town in expensive, lifted trucks with Central Valley license plates, moving as a group. They began leasing land from tribal members.

By the summer of 2021, the town was overtaken. A *Times* analysis of satellite images showed the valley floor that summer had 1,033 homes and 2,423 cannabis hoop houses, almost one for every resident.

More than half are unlicensed. Hoop houses not only fill farm lots, but backyards and front yards. They stand by the schools, behind the auto parts store, beside the Catholic chapel.

“We have been totally overrun,” Round Valley Indian Tribes director James Russ said at a county advisory committee meeting last year. “Not just this reservation, but also this whole valley.”

With the surge in illegal cultivation came heavy-duty weapons, violence and lethal chemicals. On one 2021 raid, deputies found bottles of Metrifos, with “*peligroso*”—dangerous—and a skull and crossbones on the label. The nerve poison, taken off the U.S. market in 2009, is still sold in Mexico to protect crops from rodents. The sheriff said one deputy became ill after the raid and was hospitalized with poisoning symptoms.

Working conditions on the farms are harsh. Laborers described 14-hour days, living in tents without sanitation and having to provide their own food with the promise of pay after the harvest, if it came at all. Wage theft is so common laborers circulate lists of “no pay” farms.

In 2019, 40-year-old Jose Ramon Mejia Rios, a local man, died inside the cannabis greenhouse he was tending. The county coroner determined carbon monoxide killed him. A young woman living on the property told The Times that Rios was part of a crew of growers who leased space for their illegal greenhouses from her aunt. They pulled out after the death, she said, and others took over.

The next year, two more workers died less than a mile apart, under similar conditions, coroner records show.

Osnin Noe Quintanilla-Melendez, 32, from Honduras died sleeping in a cannabis hoop house with a running generator.

Across from the local landfill, on a site with 52 illegal greenhouses, Wilson Andres Rodriguez Villalobos, a 32-year-old worker from Colombia, was found face-down inside an illegal greenhouse warmed by propane torches.

Months later, on the same farm, another worker disappeared. Victor Medina’s family in San Jose received a ransom call from kidnappers unable to prove the missing man was still alive.

“*Cuidado con Covelo,*” one person wrote on a WhatsApp forum for cannabis workers, “*que esta muy turbio.*”

Watch out for Covelo. It’s very shady.

“*Aparecen muertos a cada rato.*”

Dead people appear all the time.

In the late fall, a game warden investigating the smell from an abandoned car outside Covelo opened the trunk to find the decomposed corpse of Marco Antonio Barrera Beltran, 51, a Mexican citizen living in the Central Valley. The sheriff said he had been working on an illegal cannabis farm in Covelo. Beltran had been shot to death.

The murder investigation included a search of a bank of cannabis farms where another worker died of carbon monoxide poisoning the year before. But the case remains unsolved.

Covelo residents who spoke to The Times asked that their names not be used because they were fearful of the growers around them.

One woman’s water well now runs dry each May, the shallow aquifer tapped by massive greenhouses that surround her house on three sides. She has gone to extremes: let the garden die, collect drips from the faucets, clean dishes with a spray bottle, and rely on a garden hose from the neighbors and a storage tank to get through the summer. The growers next door haul in water by the truckload. Their generators run constantly, workers defecate in her yard, and she must block her windows at night with cardboard to cut the glare from greenhouses.

Other residents described finding a cannabis worker, unpaid and stranded in the hills, weeping and afraid his employer would return to kill him. During a recent raid of an illegal farm, sheriff’s deputies encountered two workers from Mexico who said they had been held there against their will.

“Right now, from the decimation I see in my valley, it . . . breaks my heart,” said Kat Willits, a local school administrator and former council member of the Round Valley Indian Tribes.

Willits spent her childhood in Covelo visiting family, roaming the valley, swimming in the creek beside spawning salmon. She was appalled to return as an adult and find so many community members dependent on leasing to illegal growers.

“Some people say that’s the only way they can make money now,” said Willits. “[But] they’re not making money . . . they’re also decimating their own land with the byproducts of cannabis grows.”

She said cannabis cash has hastened Covelo’s social decay, not uplifted it. There are more junked cars, more decaying homes, and more violence.

“Great tradeoff,” she said, with apparent sarcasm, “for some California college kids to be able to puff on a pen filled with a cannabis product in public.

“What people think of as a harmless drug or medicinal product have not seen what lies in the belly of the beast.”

Article entitled, “Nobody knows how widespread illegal cannabis grows are in California. So we mapped them,” by Paige St. John, Staff Writer, Los Angeles Times, September 8, 2022, Submitted for the Record by Hon. Doug LaMalfa

NOBODY KNOWS HOW WIDESPREAD ILLEGAL CANNABIS GROWS ARE IN CALIFORNIA. SO WE MAPPED THEM

by Paige St. John, Staff Writer
Los Angeles Times, Sept. 8, 2022, 5 a.m. PT

By 2013, illegal cannabis grows were such a destructive environmental force in California that state water regulators decided it was time to go beyond their complaint-driven, piecemeal approach at enforcement.

That required knowing how much cannabis there was statewide, and where.

Nearly a decade later, the answer still eludes California.

So the Los Angeles Times embarked on its own effort to map illegally grown cannabis, one that depended on a view from space.

Cannabis operations are easy to spot in satellite imagery. Plastic-covered hoop houses and plots of individual dark-green plants are distinctive and hard to miss, even more so in clear-cut tracts of forest or vast expanses of desert.

The Times obtained 2021 satellite imagery from a mix of public and private sources to canvass nearly 3,000 square miles of land in parts of six counties: Siskiyou, Trinity, Mendocino, Shasta, Butte and San Bernardino.

The analysis counted outdoor cultivation spots and measured the square footage of greenhouses. It avoided areas with other active agriculture that could be mistaken for cannabis, and looked for telltale signs of weed, such as outdoor swimming pools to hold water and outdoor plots adjacent to hoop houses.

To estimate greenhouse crops, The Times used industry-supplied yield formulas. Not all greenhouses were filled and some crops were lost to wildfire or police raids, so The Times followed another industry practice and reduced raw crop estimates by 30%.

Measured that way, the survey area contained 25 million square feet of illicit greenhouses with ample capacity to grow 2.6 million pounds of weed—enough to supply the entire legal California market.

The illegality of these grows was determined using licensing maps obtained from the state Department of Cannabis Control, county permit databases, hemp registrations and tax assessor parcel records. On Native American reservations, where unique ordinances sometimes permit commercial cultivation, The Times also used ownership maps obtained from the Department of Interior’s Bureau of Indian Affairs.

By comparing these 2021 maps with those created from satellite imagery four to five years earlier by The Times or by state contractors, the analysis documented dramatic shifts in how and where cannabis is grown.

In every place The Times looked, illicit cannabis production had increased since California reduced criminal penalties for unlicensed operations as part of legalization. There was little variation between areas that licensed cannabis and those that banned it. The findings suggest efforts to draw cannabis growers into the legal market are foundering. All but 68 of the 782 cannabis farms below Post Mountain in Trinity County, for instance, lacked a state license as of early 2022.

Cannabis researchers at UC Berkeley follow a similar methodology to map and measure changes in cannabis cultivation. Humboldt and El Dorado counties also use satellite imagery to find illicit growers and enforce local cannabis codes.

California’s effort to map cannabis began in 2013 after complaints from Butte and other counties that failure to curb illicit operations violated the federal Clean Water Act. The state’s various environmental agencies created marijuana enforcement divisions, and the California State Water Resources Control Board in 2015 brought in a private contractor to identify cannabis crops.

The results were outmoded and incomplete. The company reviewed satellite images for only a fraction of California’s geography, steering clear of federal and agricultural lands. Its process was so slow the final maps were two to four years out of date, and the 29,000 “facilities” identified as cannabis grows included not just greenhouses and gardens but also shopping centers.

Deep within the California Water Resources Control Board, a state engineer in 2017 took up the task of building a faster, more comprehensive tool. It was a machine-learning program that could automatically detect cannabis cultivation on high-resolution satellite images.

Agency staff dubbed it CannaVision.

By 2020, CannaVision could find cannabis farms missed by the state contractor, and canvass entire counties overnight. The program generated keen interest across state agencies from staff frustrated by years of hunting for cannabis crops degrading streams and endangering wildlife.

Over the course of eight months, talking point memos and draft news releases were prepared describing CannaVision as able to quickly identify illegal sites, and steer regulators to where environmental damage was greatest.

The software also was credited with the ability to calculate the amount of cannabis grown in California—though state officials say it has yet to be put to that task.

Ready for public launch, the agency in August 2020 gave Gov. Gavin Newsom's office its first full look at CannaVision, including maps that showed that illicit cultivation outnumbered licensed grows. The governor's office was represented by Newsom's senior cannabis advisor, now head of the Department of Cannabis Control, Nicole Elliott.

Days later, the public rollout was killed and its website taken down, according to documents released under the state's public records law. Even public relations staff who spent months honing the media package were not told why. The deputy water agency director who had led the presentation to Elliott described the situation as "a giant clusterf—" and told fellow directors he would explain only by private chat.

Elliott didn't recall making specific comments or objections at the meeting, a spokesperson for the Department of Cannabis Control said, "but to the best of her knowledge there was a discussion related to data quality and use of the resource as an investigative tool." The water agency said that after the briefing with Elliott, staff "received questions about the accuracy of the data" from unnamed participants and a decision was made that CannaVision "was still in its infancy and a formal rollout would be premature."

A shroud of secrecy then soon enveloped the program. Water administrators sought legal advice on keeping CannaVision out of the public eye, exempt from public records disclosure.

Internal discussions show they struggled to provide a reason to keep CannaVision confidential. Suggestions ranged from whether a private company could replicate the software for profit to whether CannaVision might make illegal cultivators targets for robbery.

"We need to put on our nefarious hats and think about how someone could use this data to do ill," CannaVision's developer wrote. "I think we should try to slow the release of it for a while since we don't really have the full picture of how a bad actor could use this."

Privacy concerns were raised again a year later to deny The Times access to CannaVision's raw maps. The water agency agreed to provide only maps showing the number of greenhouses per square mile.

It took nine months for the state agency to release the documents and emails used to produce this story, while an agency spokesperson sought to blur CannaVision's singular focus on cannabis, suggesting it could also be used to identify avocado plantations.

But internally, CannaVision was embraced as a tool against illegal cultivation.

Agency records and interviews show the computer program's data runs are now shared with agencies willing to sign confidentiality agreements, including the Department of Fish and Wildlife, which raids illegal farms. Most recently, it was used to identify cannabis cultivation on a Humboldt County watershed where low water conditions imperil native salmon. Weeks later, state cannabis officers began a series of surprise farm inspections in the area.

At a December agency presentation, the governor's environmental protection secretary, Jared Blumenfeld, applauded CannaVision as a tool to target and deter illicit cultivators, who, he said, "would be like, 'Jesus, these guys have an eye in the sky, we need to think twice.'"

Article entitled, “Illegal pot shops in California booming in plain sight. Police raids do little to stop them,” by Matthew Ormseth, Staff Writer, Los Angeles Times, September 13, 2022, Submitted for the Record by Hon. Doug LaMalfa

ILLEGAL POT SHOPS IN CALIFORNIA BOOMING IN PLAIN SIGHT. POLICE RAIDS DO LITTLE TO STOP THEM

by Matthew Ormseth, Staff Writer
Los Angeles Times, Sept. 13, 2022, 5 a.m. PT

When the cannabis dispensary Hierba opened on Cesar Chavez Avenue in October, customers had “sticker shock,” Guillermo Menjivar, the general manager, recalled.

Even with a 30% opening week discount, shoppers still couldn’t understand why, for instance, a gram of First Class Funk cost \$15.

They could be forgiven: Until Hierba—the first legal dispensary in the city’s Boyle Heights neighborhood—opened its doors, the only options in the area were unlicensed storefronts that charge far less for cannabis products because they don’t abide by the raft of taxes and regulatory obligations that state and local officials impose on legitimate operations.

A mile east of Menjivar’s clean, brightly lit business, in fact, an unmarked and unlicensed shop had put a folding sign out on the sidewalk that read, “4.5 grams for \$20.” Inside the dimly lit room was a bare-bones array of grimy mason jars piled high with bargain-priced buds.

The continuing success of illegal cannabis shops and the struggles of legal ones in the heart of L.A.’s Eastside offer a stark illustration of how California’s legalization of marijuana has gone wrong. Far from being eradicated, the black market is booming in plain sight, luring customers away from aboveboard retailers with their cheaper—if untested and unregulated—product.

Unlicensed dispensaries have become hotbeds of crime. Sometimes the operators are the perpetrators, authorities say, selling cocaine and methamphetamine alongside cannabis. At other times, they are the victims. In August 2021, a man was gunned down in the doorway of the illegal dispensary he ran in East Los Angeles.

Authorities have made little progress in curbing the cannabis black market. Prosecutions are rare, according to court records, and shop employees say some dispensaries don’t even wait a day to reopen after being shut down by the police.

“I don’t see it slowing down,” said one security guard at an illegal dispensary that has been raided four times in the last year and a half. “Just look up and down the street. It’s everywhere. And everyone’s making money.”

In the battle over black-market and legal cannabis, Indiana Street is a dividing line. To its west is the city of Los Angeles, where local laws allow retail cannabis businesses to operate, provided the required licenses and permits are obtained.

On the other side of Indiana Street is East Los Angeles, unincorporated county land where cannabis licenses are not issued and it remains illegal for anyone to operate a dispensary.

Investigators for the L.A. County Sheriff’s Department say there are 25 to 30 illegal dispensaries operating in the East Los Angeles area—the most of any of the department’s patrol regions. In all, there are an estimated 150 to 160 illegal dispensaries in the department’s jurisdiction, which includes unincorporated county land and cities that contract with the sheriff, according to a sheriff’s narcotics investigator who asked to remain anonymous because he works undercover.

Most of East L.A.’s dispensaries are clustered along Whittier Boulevard. Long the commercial heart of the neighborhood, the boulevard is crowded with narrow storefronts offering money transfers, phone repairs and tailoring, pawnshops and medical clinics, shoe stores and immigration law practices. Racks of discounted clothing compete for sidewalk space with women selling aguas frescas and chopped fruit.

Some of the dozen or so illegal dispensaries operating on any given day along the boulevard advertise openly, with signage on the property and Yelp pages. Others are more discreet, changing their names or forgoing names altogether. One shop covered its windows with signage from the car insurance agency next door.

When undercover detectives asked employees in the shop’s lobby if they sold insurance, they laughed and said no, according to a search warrant application. Detectives served the warrant last September, seizing cannabis, cash from the register and a safe, two handguns, a rifle, a drum ammunition magazine and bags of what authorities suspected was cocaine, court records show.

A Times reporter visited the dispensary two months after the raid. Through the first door was a gloomy lobby with couches pushed up against the walls, a vending

machine in a corner and a door at the back with a sign that read, “We’re open.” Through that door, then another one, was a small room lined with glass display cases. Inside were jars full of cannabis priced from \$8 to \$10 a gram.

The sole employee said he was just a clerk and couldn’t say who managed the dispensary. A request for comment left with the clerk wasn’t returned.

Dozens of affidavits filed at the East Los Angeles courthouse to obtain search warrants make clear that for most dispensaries along Whittier Boulevard, being raided by the police is no deterrent. One shop on Whittier Boulevard has been searched by the Sheriff’s Department four times in the last year and a half, most recently in February, when detectives carried off its inventory and \$819 in cash.

The dispensary’s security guard described a recent raid to a Times reporter. Deputies broke down the door, seized all the product and money, and cited him and several other employees. With a court date approaching, the guard said he didn’t plan to show up and predicted the authorities wouldn’t pursue the case.

The security guard, who declined to give his name, said he had worked at a Marshalls department store before getting the job at the dispensary. He said he didn’t know who owns the shop, the source of the cannabis it sells or how much money it makes. He and other employees were “just trying to make our bread,” he said.

“People come in and they’re appreciative because it’s a lot cheaper than if they went somewhere legal,” the guard said, noting that the price they see is the price they pay—no taxes added.

Down Whittier Boulevard, a dispensary called Whittier’s Best Buds has been raided five times in the last year, search warrants show.

Investigators seeking a judge’s permission to search an unlicensed dispensary and carry off evidence—cannabis, digital video recorders, cash, paperwork that might indicate its ownership structure—have a low bar to clear, search warrant records show. It is often as simple as noting people entering a storefront empty-handed and leaving with small white bags, walking into a shop in plainclothes and asking an employee about marijuana prices, or citing a dispensary’s Yelp page.

Detectives can also apply for a court order to shut off the business’ power for 90 days, although, as a deputy wrote in seeking yet another warrant to search Whittier’s Best Buds, operators “find creative ways to power the business.” When the shop was raided in February, detectives carried off a Predator 3500 generator along with cannabis and \$4,159 in cash.

Sandwiched between a cellphone store and a shop selling women’s clothing, the dispensary offers grams of “top shelf” marijuana for as little as \$8, according to a menu taped above a security window. In the dispensary’s lobby, which was painted with a large, colorful cartoon character inhaling from a bong, a man who identified himself as the owner complained to a Times reporter about the Sheriff’s Department’s raids, which he described as “legal robbery.”

Wearing a baseball cap that read “F— Joe Biden,” he said his initial goal was to obtain a license and the necessary permits to run an above-board business in an area of the county that allows it. “Lots of people want to get licensed, but the government doesn’t want to give it to them,” he said.

“Tax, permit, license,” he said, ticking off the things for which a legal operator has to pay. “We’re going to take your money. Without [the] license, we’re going to f— you up with raids. Either way, you’re going to lose.”

The raids have not made him consider shutting down, he said. “Why am I going to close shop? People are crying for this stuff, crying for weed.”

Many of the people arrested on suspicion of operating or working at illegal dispensaries in unincorporated parts of the county are not prosecuted. Those who are typically don’t face cannabis offenses, but weapons charges after being caught with guns, according to a review of court records. Even then, some defendants were allowed to enter diversion programs and have their charges dismissed.

One man was arrested at Whittier’s Best Buds on suspicion of maintaining a place to sell controlled substances, a felony, and was found to be carrying a handgun, records show. Charged five months later with a misdemeanor crime of possessing a concealed gun, the man avoided prosecution by entering a diversion program. After he showed he’d taken a gun safety class and registered the weapon, the judge ordered the Sheriff’s Department to return \$600 in cash and the newly registered Glock 19 handgun they’d seized from him, records show.

Greg Risling, a spokesman for the Los Angeles County district attorney’s office, said prosecutors charge people with crimes associated with operating illegal dispensaries “when the evidence has been sufficient to prove.” The typical charge, Risling said, is a violation of the county prohibition on cannabis dispensaries, a misdemeanor.

Lt. Howard Fuchs of the Sheriff's Department's Narcotics Bureau disputed this. "The district attorney will not file these cases whatsoever," he said. "Even if it's near a school, they've told us they will not file these cases."

The lieutenant said prosecuting people who operate or work at illegal dispensaries—and securing meaningful penalties—would be the most effective way to shut them down. Other strategies, like obtaining court orders to cut off a dispensary's utilities, are easily circumvented, he said, while civil actions pursued by county lawyers to evict or lock out illegal operators are time-consuming and difficult to carry out in a meaningful way given the scale of the problem.

When it comes to charging people for crimes related to illegal dispensaries, "there's this attitude: It's just cannabis, we're not going to incarcerate people for that," Fuchs said. "Well, you're just telling the legal market, 'Good luck.'"

Illegal dispensaries, meanwhile, are making money "hand over fist," Fuchs said. His detectives have seized cash and ledgers documenting sales that indicate the busier ones are making as much as \$25,000 a day in revenue, he said.

An illegal dispensary can cost just a few thousand dollars to open, investigators say: rent, product, some display cases, a surveillance system, wages for a few employees.

Compare this to Menjivar's dispensary, Hierba. The shop's backers have invested several million dollars and worked for nearly three years to open it, he said. Driving up the start-up cost, he said, are delays in the application process: state regulators certified the dispensary in April 2021, but city authorities did not allow it to open until October.

For some applicants, the process has taken as long as 18 months, Menjivar said. All the while they must keep paying rent. "You're literally at their mercy," he said.

Legal operators must also abide by local regulations that dictate where dispensaries can operate, so called "green zones" away from schools and playgrounds. This restricts the real estate available to a scrupulous dispensary operator.

All of this contributes to the price that consumers pay, Menjivar said. Certification that the product has been tested for toxins, excise taxes on wholesale purchases, sales taxes levied by state and local authorities—"it costs more to do it the right way," he said.

Vito Ceccia, a detective supervisor who oversees enforcement of unlicensed cannabis shops for the LAPD, said police work alone won't be enough to ensure legal dispensaries survive. Local officials will need to educate the public about the benefits of patronizing licensed shops and stress the quality control that goes into their products.

"We realize this is not a law-enforcement-specific issue anymore," he said. "We're not going to arrest our way out of unlicensed cannabis sales."

The evening of Aug. 11, 2021, Daniel Franco was standing outside the illegal dispensary that he operated on Whittier Boulevard when a barrage of gunshots were fired from across the street.

As Franco tried to retreat inside, a bullet went through his head. He died on the floor of the shop, six feet from his revolver, which was resting on a table, according to a coroner's report. A coroner's investigator noted bullet holes in the walls and "large amounts" of cannabis heaped in plastic trays in the room where Franco died.

Twelve shell casings fired from an assault rifle were found across the street. Eight more casings lay near the doorway of the dispensary, indicating that the shooter had chased after Franco, the investigator wrote.

His death is one example of the violence that plagues illegal dispensaries, whose owners, employees and customers are vulnerable to being robbed, swindled or killed, authorities say. Nonfatal crimes are rarely reported for fear of drawing scrutiny from the police.

It's unclear why Franco was targeted; the sheriff's detective investigating his death, Scott Giles, declined to discuss the case. "We don't want the public or the people responsible to know what we know," he said. No arrests have been made.

In a search warrant served in connection with the shooting, sheriff's investigators said they believed Franco's shop may have been associated with another illegal dispensary. A week after the killing, someone called the Sheriff's Department to report seeing two men, one carrying an AR-15-style assault rifle, enter a store on Cesar Chavez Avenue a mile and a half northwest of Franco's shop, a detective wrote in an affidavit used to obtain the warrant.

When deputies responded to the call and entered the store, they discovered it was a dispensary. Cannabis, hashish, honey oil and, in a corner, an AR-15 were in plain view, according to the warrant. Three men and a woman were detained, and detectives carried off the rifle, the cannabis products and \$971 in cash.

Deputies had raided the shop—a blue stucco building with an iron security door and no signage—three times in the last four months. Detectives believed the dispen-

sary was “related” to Franco’s shop “because the same employees have been arrested at both locations on multiple occasions,” the warrant says.

One of the men detained that day, Israel Zuniga, has been charged with possessing a concealed gun in a public place, records show. He was arrested at the same dispensary three months later and charged with maintaining a place for the purposes of selling marijuana. In March, he was arrested a third time at the shop and now faces a second charge of possessing a concealed firearm, records show. Zuniga, 23, has pleaded not guilty to the charges—all misdemeanors—and remains free, pending the resolution of his cases. He has not been charged in connection to Franco’s killing.

The dispensary on Cesar Chavez Avenue where Zuniga was detained remains open. In its reception area, a Times reporter asked the clerk to speak with the shop’s proprietor. “Hold on,” he said, and disappeared through a door in the back of the store. He returned about a minute later and said he would have to “kindly decline” due to “privacy reasons.”

Most of the illegal dispensaries in East Los Angeles are being “taxed” by gangs, said the undercover sheriff’s investigator. The more sophisticated gangs demand money, while the cruder ones are content with free product, the investigator said. “They know they’re both doing illicit activity, and no one’s going to say anything,” he said.

Two of the area’s largest gangs, Varrío Nuevo Estrada and East L.A.-13, have opened dispensaries of their own, according to the investigator, staffing them with gang members and selling not just marijuana but methamphetamine, heroin and guns.

“They saw it was not complicated at all to run a cannabis storefront,” he said. One security guard who works at several illegal dispensaries said gang members had been trying to tax the owners of a shop where he worked on Whittier Boulevard. The guard, a 26-year-old Compton resident who earns \$15 an hour to stand guard with an unregistered handgun, asked not to be identified because he is involved in illegal activity.

Around 9 one night last September, he noticed several men standing outside the dispensary. It seemed like they were casing the shop, he said, so he walked outside and hid his gun in his car. If he was about to get robbed, he thought he’d rather not have it on him.

Eight men walked into the dispensary. One pointed a gun at him and told him to lay down and put his hands behind his head, he recalled. They took his phone and his keys. He heard the screams of the women who worked as bud tenders, he said, and he thought they were all about to die.

The men took “everything we had,” he said, including the shop’s product, money from the register, and money and personal property from him and other employees.

He believed the men who robbed the dispensary were from the same gang that had been trying to tax it. As far as he knew, he said, the owners never reported the robbery or the extortion.

“What are the shops going to do?” he asked. “Call the cops, when it’s illegal?”

APPENDIX

QUESTIONS FROM HON. JOHN GARAMENDI TO JOAQUIN ESQUIVEL, CHAIR, CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

Question 1. Chair Esquivel, do you agree that modern, commonsense water management in drought-prone states like California should rely on real-time monitoring and adaptive management?

ANSWER. Yes. We have learned tremendously since 2013, when California entered the current period of extended drought. Prior to that time, diversions were not metered or frequently measured, and diversion data was reported only every three years. We learned that we cannot manage a system without having a robust and meaningful accounting for diversions and demands (including municipal, agricultural, and environmental needs). But at present, we do not have a real-time system to monitor diversions. There is growing, if not consensus, recognition that the models and data that we relied upon during the last century of water development are not suited to an era of climate change and rapid aridification. The lack of real-time data has presented challenges in the general administration of California's water rights system, not only for the State Water Board but for all water users.

California has taken significant steps to better manage and understand water use data since the start of the current drought. Legislation enacted in 2015, during the last drought, now requires diverters to meter and measure their water use, and importantly, to report that data to the Board. Additional investments in 2021 of more than \$30 million were allocated to modernize the state's water rights data management system. Further investments in 2022 will initiate pilot projects to obtain telemetered diversion data so that we can understand real-time demands to better respond and adapt as conditions warrant. These efforts are expensive, but the costs of not taking action are even greater, and the ongoing costs point towards the need for sustained and ongoing funding for data and information technology infrastructure.

Question 2. Chair Esquivel, are you aware of any credible legal challenge to the 2016 WIIN Act by an outside litigator, specifically that law's requirements for real-time monitoring and adaptive management for the coordinated operations of the federal and state water projects?

ANSWER. The State Water Board is not aware of litigation challenging the narrow issue of real-time monitoring and adaptive management for the coordinated operations of the Central Valley Project and State Water Project (CVP/SWP). However, the term adaptive management can be challenging because it means different things to different people and in the context of the WIIN Act provisions related to California Water, it is undefined. (Public Law 114–322, sections 4001–4014.) It should also be noted that the State Water Board would not be a party to litigation challenging the WIIN Act. The U.S. Department of Justice or applicable federal agencies may be better positioned to answer such questions.

The State Water Board is aware of more general, ongoing litigation involving the 2019 biological opinions for the CVP/SWP operations. To the extent the WIIN Act required the delivery of “the maximum quantity of water supplies practicable” (Sect. 4001, subd (a)) and the use of “research and adaptive management procedures” in implementing biological opinions for smelt and salmon under the federal Endangered Species Act that “could result in the availability of additional water supplies” (Sect. 4001, subd. (b)(12)), these principles were incorporated into the reconsultation that resulted in the 2019 biological opinions and 2020 Record of Decision for CVP/SWP operations that are at issue in the ongoing litigation of *California Natural Resources Agency et al. v. Raimondo* and *Pacific Coast Federation of Fisheries Associations et al. v. Raimondo*.

Question 3. Chair Esquivel, do you agree that the metric of unimpaired flow should be just one of many criteria the State Water Resources Control Board uses

in determining the correct application of environmental laws like the Clean Water Act or similar state regulations? In other words, do you agree that focusing solely on unimpaired flows can ignore the other, equally or more important, environmental conditions in the water body that affect water quality and endangered species?

ANSWER. Native species in the Bay-Delta ecosystem are experiencing an ecological crisis and a large body of scientific information indicates that increasing flows into and through the Delta will improve conditions. The importance of adequate flows for the protection of fish and wildlife cannot be underestimated. For fish and other aquatic life, flow *is* habitat and it influences the quality of nearly every other habitat feature, including temperature, water chemistry, and food production, such as through floodplain inundation. These habitat features, in turn, affect the risk of disease and predation, reproductive success, growth, migration, feeding behavior, and other ecological factors that determine the viability of native fish.

Unimpaired flow represents the water production of river basins, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. It differs from natural flow because it is the flow that occurs at a specific location under the current configuration of channels, levees, floodplain, wetlands, deforestation, and urbanization. A flow objective based on unimpaired flows is intended to restore a specific percent of the flows for the reasonable protection of fish and wildlife. In 2018, the State Water Board adopted new flow objectives for the San Joaquin River and its three major tributaries the Stanislaus, Tuolumne, and Merced rivers. These flow objectives are expressed as a range from 30 to 50 percent of the rivers' unimpaired flow with a starting point of 40 percent. In establishing the new flow objectives, the State Water Board balanced many factors including the past, present, and probable future beneficial uses of water (e.g., municipal supply, agricultural supply, recreation, etc.) as well as economic and other considerations.

The State Water Board acknowledges, however, that increased flow is just one tool that can be brought to bear to improve ecosystem conditions. While the State Water Board's regulatory authorities in the water quality planning context are primarily limited to parameters such as flow, we have long encouraged watershed stakeholders to come together to propose Voluntary Agreements that provide a broader suite of solutions, including flow and non-flow actions such as new and enhanced habitat that could provide greater ecosystem benefits than flow alone and potentially do so at a lower water cost to water users. Therefore, at the same time that the State Water Board adopted objectives based on unimpaired flows, it included a pathway for implementing voluntary actions which, depending on the scale of the non-flow measures, could support a reduction in the unimpaired flows to as low as 30 percent. This means that under the current Bay-Delta plan requirements up to 70 percent of San Joaquin River tributary flows can still be diverted for human use.

The State Water Board's provision of an alternate pathway in its 2018 Bay-Delta Plan update is a reflection of how we have long encouraged watershed stakeholders to come together to propose Voluntary Agreements. To this end, the State Water Board has directed its staff to provide technical and regulatory assistance for the development of Voluntary Agreements that could be considered by the Board as an implementation mechanism for a comprehensive update to the Bay-Delta Plan. We are optimistic about the progress that has been made to craft Voluntary Agreements and remain committed to evaluating them as part of our Bay-Delta update process, as these agreements create the best opportunity to for the Board to consider and incorporate non-flow actions. In summary, the Board considers multiple factors and mechanisms, in addition to unimpaired flow, when establishing water quality requirements and fulfilling its responsibilities under the Clean Water Act and Porter-Cologne Water Quality Control Act.

QUESTIONS FROM HON. CHRIS PAPPAS TO MICHAEL D. WITT, GENERAL COUNSEL, PASSAIC VALLEY SEWERAGE COMMISSION, NEWARK, NEW JERSEY, ON BEHALF OF THE NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES

Question 1. Mr. Witt: For the past fifty years, the Clean Water Act has helped to ensure that all Americans have access to clean and safe water. Now, communities across the nation are facing growing threats to clean water access, including aging infrastructure and increased flooding and droughts. Digital, smart water technologies can help water managers adapt to these challenges and maintain access to clean and safe water. Using digital tools, water managers can make better use of their data to improve asset management strategies, mitigate the impacts of flooding and drought, and save time and money. For example, the water sector has identified lack of data on the condition and functioning of water assets as a key factor that

leads to poor resource prioritization and unexpected crises, problems that can be solved through digital asset management.

In your experience, how can smart, digital water infrastructure technologies help communities mitigate the impact of climate change?

ANSWER. Infrastructure technology is the heart of every wastewater reclamation facility in the United States. It informs, guides, and in many instances, governs day-to-day operational decisions. To add context to the importance of infrastructure technology, the Passaic Valley Sewerage Commission collects approximately 12,000 data points from its facilities on an average frequency of almost every 15 seconds. It is an enormous amount of information to manage, digest, and put into useable form for facility operators.

With this context in mind, smart digital water infrastructure is an invaluable partner in modern wastewater operations. Enhanced digitization, smart technology, and innovative software platforms allow reclamation facilities to better manage assets and data, track trends, provide quantitative and qualitative outcomes, and improve operations in a way that was not previously possible. These key tools are imperative to ensuring full optimization of clean water utilities and hardening assets against climate change.

Wet weather events are becoming more extreme and sensors and applications for real time monitoring are more imperative than ever to mitigate against these impacts. For example, the use of flow meters and hydraulic modeling to manage infiltration and inflow in the collection system are crucial prior to and during storms by helping utilities with real-time monitoring and increased system awareness. In short, the finer the control over the facility, the more efficient and optimal its operations become, resulting in the ability to take in and treat an increased amount of flow during wet weather events. This, in turn, can reduce overflows in areas with combined sewer systems and/or reducing local area flooding caused by surcharged sewer lines.

Technology also plays a major role in helping utilities reduce their carbon footprint. Sensors and data analysis platforms targeting energy efficiency and optimization, such as energy management platforms and asset monitoring devices, can help utilities manage and reduce their energy use.

Question 2. The Bipartisan Infrastructure Law provided critical funding to rebuild and modernize our nation's water infrastructure, including directing the Environmental Protection Agency to accelerate the identification and deployment of advanced water technologies.

In your opinion, how could the federal government help facilitate the adoption of smart, digital water technologies?

ANSWER. Like any industry, the wastewater treatment sector is not immune to change and the passage of time, and must be prepared for both. The last two decades in particular have posed a number of rising challenges, including: the management and optimization of aging infrastructure; the escalation of energy, capital, operations, and maintenance costs; the expansion of compliance obligations; the emergence of PFAS and other contaminants; resource recovery, climate concerns, and the need to reduce the carbon footprint; and workforce retention and development difficulties. Combined, these challenges have placed public clean water utilities at a critical juncture regarding the affordability and sustainability of their services.

Developments in current technologies have already helped to address some of these challenges in a cost-effective manner. As these challenges grow and become more complex however, continued innovations in digitization and smart technology will be key to fully optimizing public clean water utility operations and ensuring the ability to continue meeting our communities' public health and environmental goals.

The federal government must be an integral partner with states and local communities in ensuring this happens. Congressional and administrative policies and resources must be targeted to ensure greater implementation and use of developing smart wastewater technologies. This includes dedicating appropriations for programs that advance technological innovation, establishing an ARPA-H2O style program, having EPA provide greater clarity and guidance that innovative technologies are eligible funding uses under the State Revolving Funds (SRFs), and expanding and prioritizing eligibilities for technology through the SRFs.

This is an area in which NACWA has taken a strong focus and lead over the past several years with both its public and private sector leaders. We look forward to working with Congress and the Administration on this important matter.